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ABSTRACT

A case history of organizational development in the Kent, Washington, school district from August 1967 to April 1972 is presented in 14 chapters and numerous appendixes. The first section contains a summary, the theoretical scheme, and the principles used in building the cadre of organizational specialists. Chapters 5, 6, and 7, concern interpersonal "first-level" skills; conditions facilitating interpersonal responsiveness among teachers, communication in schools with collaborative teaching structures, and preconditions necessary before training produced constructive adaptation. Chapters 8 and 9 concern "second-level" skills that serve to enhance the functioning of systems; collaborative decision-making among teachers, and power-sharing between principals and teachers. Chapters 10, 11, and 12, move to "third-level" skills--the capacity of the school for performing as an entire system; a substudy of the school as a processor of innovations, the work of the cadre as an agent of constructive adaptation, and the cadre as a system in itself. Chapter 13 probes the strengths and weaknesses of the data, research design, and analysis techniques used in the study. Chapter 14 contains a summary of the project and recommendations. (Author/MLF)

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ORGANIZATIONAL SPECIALISTS IN A SCHOOL DISTRICT:
FOUR YEARS OF INNOVATION

by

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a report of the
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at the
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Consultation for Innovative Schools: OD for Multiunit Structure Schmuck, Murray, Smith, Schwartz, and Runkel

PREFACE

Final

"Irma, you stop that or I'll . . . I'll . . . ." But now the teacher is remembering how ineffective threats have been in the past with Irma and with other students, and she* is remembering, too, all she has read about how threats and coercion more often increase disruptive behavior than decrease it. "Irma, I don't mean to threaten you, but . . . ." Wait! Over and over, the older teachers have told her not to be "soft" with students, or she'd lose control completely. And here she is almost apologizing to Irma. Moreover, the altercation has gone on too long already. All the other students are watching avidly. The teacher doesn't want this to become a show about which the students will later talk gleefully to other students and other teachers. She doesn't want to get behind in her plan for today's lesson, either; falling behind the schedule could lead to complications with the department head, perhaps the principal, even parents. She must do something to cut this short. "Irma, I'll talk with you about this after school."

Irma is gloomy. I wonder what was really bugging her? -- Irma asks herself. I don't think she was actually paying much attention to me. She wasn't really treating me like a person -- just a nuisance. She sure was upset, though. But there was more upsetting her than just me. She interrupted me and she interrupted herself twice. I wish I knew what makes her mad. Maybe I could know if she'd let me. I don't want to make her mad. I just want to be myself and have her treat me right.

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* Instead of using the clumsy "he or she," I have pretended to pick a student and teacher at random; the largest probability is that they would be females.

If Irma could understand more about what makes the teacher upset, she could be more clear in her mind about how to talk things through with her teacher this afternoon. But Irma is in the dark about the other things that are keeping the teacher from being straightforward, clear, and decisive. Those other things are worrying Irma. It's not easy to reach an understanding with a teacher when the teacher hasn't reached an understanding with herself. Irma wonders whether there is something the teacher is going to "take out on her." As Irma worries about the coming "talk," her mind wanders from what is happening around her. Another teacher scolds her for her inattention. Irma feels she is getting more than her share of trouble. Teachers seem to be born grumpy. They like to gang up on you, too.

The expectations, the worries, the apprehensions and misapprehensions that go on between a teacher and student can make a day or ruin it, for one or for both. An altercation such as the one we have described distracts the student's mind and emotion from history, English, science, or whatever was in the teacher's lesson plan. It distracts the other students, too. Instead of the day's lesson, they learn that teachers don't often tell you what's bothering them; they just order you around. They learn that teachers often use you to fight battles that you didn't ask to be a part of. They learn that each teacher thinks his or her little classroom is your whole world; a teacher almost never seems to wonder whether things might be happening to you in other classrooms or even in another part of your life. They learn that this must be the way they will be expected to act toward

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other humans, especially other humans in subordinate positions, when they are a few years older and making their own living. Maybe they should start right now.

The altercation also distracts the teacher's mind and emotion from what she originally thought to teach. Her attention flies from the mind of the student to the demands of the organization (the school, the district, the community), and the student is lost under the wheels of the juggernaut. And something like this happens on most days in most classes of most teachers in most schools in the United States.

It is not good enough to say that Irma shouldn't do things the teacher considers disruptive, nor to say that the teacher shouldn't worry about the reactions of older teachers, nor that the principal should do something about it. When we say that someone should or should not do something, we are only saying that we wish someone would or would not do it. The question is begged. The problem remains: how can we help someone to do, or not to do, the thing we wish? -- or the thing that person wishes but cannot somehow manage?

We take the view throughout this book that the other people in the school itself can be a source of help -- that they can be much more helpful to one another than they usually know how to be or than they are usually allowed to be. But if they are to become more helpful to one another, they must learn better how to reach out for help, how to respond to appeals for help, and how to allow one another to do both. That is, school staffs must learn interpersonal and organizational skills that are not now often to be seen.

Learning new interpersonal and organizational skills in schools and the ways they can be put to use are the chief topics of this book. We tell the story here of four years in the history of the Kent (Washington) school district when a number of schools there and, indeed, the district as a whole were exerting a great deal of effort to achieve new organizational ways of doing things.

Irma's teacher knows other teachers in the school who seem to "know what to do" when disruptions occur in class. Their students seem almost always to go on feeling friendly toward them even though those teachers hold the students to certain rules of behavior. But Irma's teacher has never talked to those other teachers about Irma or about any other difficulty she has encountered in her teaching.

A teacher who asks for help, Irma's teacher says to herself, is confessing incompetence. A good teacher manages her own classroom by herself. Asking for help with discipline is about the worst admission of incompetence you can make. I mustn't ask anybody's advice on what to do about Irma.

I'd certainly like to sit in on class or two of that teacher across the hall, Irma's teacher thinks. Her room always seems so cheerful, her students so interested, so many students hanging around smiling after school. I'd certainly like to watch how she does things. I wish it were all right to ask another teacher a thing like that. And maybe if she would be willing to watch me teach, she could give me a pointer or two. But I couldn't ask her to do that. When would there be time? And anyway, Irma might act up, and there I'd be.

Irma's teacher goes home that night feeling very lonely.

Please don't call Irma's teacher a scaredy-cat or a weak sister. The way she protects herself is a very common way people protect themselves in organizations of all kinds. Automobile workers do it. Hard-hats do it. Vice presidents do it. Even presidents do it. Even lovers, in fact, do it.

In Chapter 5, we shall examine the responsiveness that teachers in elementary schools were showing, during the years of our study, to requests for help from colleagues. Teachers in some schools were much more responsive than those in other schools. The most responsive schools were those in which the staff had received some training for organizational development and had learned to go on communicating with one another even under stressful, emotional conditions. In those schools, teachers took the risk of letting others know their worries. They reached out for help. Evidence we shall present in Chapters 7, 8, and 10 makes us believe they often got it. In those schools, we think Irma and her teacher would have found it easier to tell each other their troubles.

Also in Chapter 5, we shall tell about a junior high school in which the staff (not the students) underwent training in organizational development. Afterward, quantitative measures of talking in classrooms turned up the fact that students in that school had begun initiating their own remarks and questions, directed to the teacher or to other students, at a considerably greater rate than students in an untrained junior high school. If Irma had been a student in that junior high school after the training, she would have found it still easier to talk with her teacher. Unlike many schools, that school was one in which initiating a remark or question to the teacher was no longer considered a bold thing to do. It was probably not considered strange, either, for a second student or offer to clarify a conversation between the teacher and a first student. Irma and her teacher might have got sympathetic help from other students.

If the staff of Irma's school had known about organizational development (OD), they might have wanted to try it. There might have been others in the school, like Irma's teacher, who felt lonely, who wished they could ask for help or offer help, and who wanted to work in a more collaborative way. It is not a foregone conclusion, however, that Irma's school would have profitted from OD.

Several chapters in this book set out some conditions that help or hinder a school in "making a profit" from training in OD. In Chapter 6, we shall learn that too little training can be worse than none at all. If Irma's school had made the mistake of signing up for a couple of days of OD training with the attitude of "giving it a whirl" or "not jumping in over our heads right away," the staff might have found themselves facing problems they didn't know how to cope with. They might have found that they were more willing to tell one another their worries, but unable to get together to do anything constructive about those worries.

Irma would have come upon a long stretch when she couldn't get a minute of her teacher's time. Her teacher would have been gone for the two days of training and then would have to catch up on back work. Then there would have been a series of meetings of the faculty or of parts of it in which members would try to figure out what to do about the problems they had uncovered. And Irma's teacher would get still farther behind in her work, because these meetings would make more work without reducing any of her regular work. And when Irma did succeed in talking with her teacher, she would find her teacher more distraught and even more confused about whether she wanted to go on being a teacher.

We shall find Irma's teacher exhausted and discouraged again in Chapter 10. There, we shall examine elementary schools in Kent and neighboring districts that attempted complex organizational innovations. We shall find that most made the attempt, and that most of their innovations failed after one, two, or three years. Along with many colleagues, Irma's teacher will sigh dispiritedly, "The more things change, the more they stay the same." But Irma woun't be thinking of her teacher as "her" teacher any more; Irma will have seen too little of her. Chapter 10 will also tell us, however, that OD training did help a few of the schools to bring their innovations into actuality.

Chapter 7 carries the story of Chapter 5 a little further. We shall see in Chapter 7 that ability to continue communicating under emotion-arousing conditions is a necessity if a school faculty is going to work together more closely, but that it is not sufficient. The faculty must also exhibit readiness for collaboration. Like Irma's teacher, the bulk of the rest of the staff must perceive some gains to be had from collaborative work and must be ready to take some risks to achieve it.

If Irma is especially lucky in her next school, she will find that the teachers there do not merely "process" her through a number of "subjects" like a can of vegetable soup passing the bean spout, the carrot spout, the onion spout, and the water spout. She will find that they want to open to her many aspects of the world, and that they want to talk with her often to try to see things the way she is seeing them. But arranging a curriculum and a schedule to make this kind of individual attention possible requires a great deal of collaboration, trust, commitment, and close coordination among teachers. If Irma is lucky, the teachers in her next school will have achieved these relationships. They will have achieved them partly by paying close attention to the communication channels that are actually used in the school, so that when they need information or collaboration, they know how to find the appropriate person quickly. We shall display data about this in Chapter 8.

We shall see in this book how training for OD helped some schools and some central office groups cope with some problems, and we shall learn something about organizational skills that are enhanced by OD training. But how can a school maintain its heightened skill? Consultants in organizational renewal are as expensive as any, and expenditures for consultants are easy to knock out of a school district's budget. Nor do people in a school learn how to be their own consultants merely by undergoing OD-training themselves. How can consultation or training for OD be kept readily available to school and district?

In Kent, we brought together a couple of dozen members of the district who had become interested in giving organizational consultation to their district. Working part-time, these people have carried on OD work in the Kent district and beyond it from 1969 to the present. The story of this group, the cadre of organizational specialists in Kent, is the central and continuing story in this book. We shall discuss the group directly in Chapters 2, 4, 11, and 12. We discuss the impact of their work, in one way or another, in almost every chapter.

The group of OD specialists in Kent have always called themselves the "Kent Communication Consultants," mostly for historical reasons. In speaking of the general idea of a group of members of a large organization working part-time as organizational consultants to their own organization, we ourselves began using the term "cadre of organizational specialists." To make things simpler for readers of our other writings, we shall use the latter term throughout this book instead of the name the Kent cadre actually gave itself.

We summarize our chief substantive findings and our chief recommendations to practitioners in Chapter 14. In its substantive findings, we consider this book to be a companion volume to Consultation for Innovative Schools: OD for Multiunit Structure by Richard Schmuck, Donald Murray, Mary Ann Smith, Mitchell Schwartz, and Margaret Runkel (1975). At several places, we shall mention the way findings from the "Consultation Book" fit with the findings we report in this book.

Both this book and the Consultation Book are reports of projects that were part of the program on "Strategies of Organizational Change" at the Center for Educational Policy and Management at the University of Oregon, a program that Richard Schmuck and I began in 1967. We reported the earliest project of the program as Organizational Training for a School Faculty (Schmuck and Runkel, 1970). Our latest work is yet to be reported in book form, but some parts of it have been described by Arends and Phelps (1973) and by Schmuck (1974).

This book mentions a great deal of consultation or training for OD furnished to the Kent district by us or by the Kent cadre of organizational specialists. We describe some of that training to some extent in some of the chapters and appendices of this book, but we give no detail here on how to do it. For that detail, we refer the reader to the Handbook of Organization Development in Schools (Schmuck, Runkel, Saturen, Martell, and Derr, 1972).

During the period of the Kent project, the organization to which our program of research and development belonged at the University of Oregon was known as CASEA. In 1973, however, a reorganization took place, and CASEA became the research and development branch of the Center for Educational Policy and Management (CEPM) of the College of Education at the University. Chiefly for sentimental reasons, we have used the name in this book that all the participants knew us by -- CASEA.

The chief reason Richard Schmuck does not figure as an author of this book is that he was busy being the chief author of the Consultation Book. He and I were the leaders of the Kent project. Though both of us participated in all phases of the work, Schmuck took special leadership of the consultation and training, while I managed most aspects of the data-collection and processing. Daniel Langmeyer, then a Research Associate at CASEA, carried a major burden of consultation and training during 1968-69; he led several important sub-teams.

A core team of research assistants shared with us the arduous duties of consultation, training, planning, reporting, debriefing, and constant travelling: Ronald Bigelow, Paul Macbeth, Ronald Martell, Isabelle Moser, Jack Nelson, Steven Saturen, Mary Ann Smith, William Starling, Robert Talbott, Neil White, and Spencer Wyant. When we speak later in the book about what "we" did or thought, or about "CASEA's" presence in Kent, or about the reactions of the Kent people to "us," we almost always mean this core team, including, of course, Runkel, Schmuck, and Langmeyer. The dissertations of Bigelow, Macbeth, Saturen, and Wyant have contributed to this book. We are grateful to Donald Murray of the Washington Education Association for leaping into the breach twice in 1968 when we needed an extra trainer, and an expert one, in a hurry.

Important logistic support and occasional consultation were given the project by Molly Newcomb and Margaret Runkel. Aid in collecting data came from Rosemary Briggs, James Carlson, Marilyn Hammond, Douglas Moser, Lois Newton, and several members of the Kent cadre of organizational specialists. Chester Cotton and Carolyn Williams helped us frame and revise our hypotheses as we began digging into the data. Dorothy Van Cleef supervised the crew of workers who processed the questionnaires and coded the open-ended answers; her constant and rigorous demand for accuracy saved us from more than one ignominy. Rosemary Briggs, Cheryl Brown, Lois Newton, and Florence Wanker were the program's secretaries during the Kent project. We are grateful for the expert care given our data by Fred Beisse and William Ekstrand of the Computer Center of the University of Oregon. Patricia Eysenbach and Dorothy Van Cleef doggedly but alertly typed most of the manuscript in several drafts.

We are forever grateful to the participants in the project -- to the school people in Auburn and Federal Way who answered questionnaires with little hope of ever making a profit from doing so, and to those in Kent who hoped they would not be asked to participate any more than that. We are especially grateful to those in Kent who took the risk of undergoing OD training with us or with the Kent cadre of organizational specialists. They enabled us to gain the experience that underlies this book and that led to later projects. We are glad to say that the evidence displayed in this book convinces us that several schools and central office groups benefitted from our work with them and from the cadre's work with them.

We would like to express our gratitude by name to the many who risked their time, their comfort, and their very careers with us. In the interests of confidentiality of information, however, we shall mention only two: William Iles, superintendent at Kent at the time the project began, and Charles Blondino, then supervisor of Language Arts and the first coordinator of the Kent cadre of organizational specialists. And we say thank you to George Pain, counselor in one of the Kent junior high schools, because he was the person who initiated the first contact between CASEA and the Kent district.

Warren Bell, Gordon Lindbloom, and Deborah Pickens joined the program on Strategies of Organizational Change after the field-work of the Kent project had been completed. Lindbloom and Pickens made original contributions to particular chapters. Together, Wyant, Bell, and I put major shape on the data analyses and upon the organization of the book. We also wrote and re-wrote major parts. Richard Schmuck gave important suggestions and unflagging moral support. We are indebted to Terry Newell, of the U. S. Office of Education, for his permission to use his article as our Chapter 1. We found it an excellent summary of the state of the art of organizational development in schools at the time we were writing this book.

Finally, all the authors of this book are deeply grateful for the skilled and careful editing the manuscript got from Jo Ann Mazzarella. Any reader who could have seen the manuscript before she improved it would feel as indebted to her as we do.

Philip J. Runkel

CEPM

August 1975

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Chapter 1

ORGANIZATIONAL DEVELOPMENT: THE STATE OF THE ART

by Terry Newell

Literally billions of dollars have been spent over the past several years to design, test, package, and install an unprecedented number and variety of educational innovations in our Nation's classrooms. Additional sums have been spent to train school staffs, modernize the physical plant, and expand the range of educational services available to American school children. The time, money, and hope that have been invested in these efforts offer a striking example of America's belief in the importance of education to its future.

Whether these reform efforts have succeeded, and if they have, to what extent, are by no means settled questions. Educators and lay observers disagree about both the meaning and existence of evidence that reflects on what works and what doesn't in improving the education of children. One point on which they do agree, however, is that the *results* of the educational innovations in which billions were invested have not fully matched the *promises* with which such efforts were launched. While the gap between reality and expectation may not be causing a "crisis of confidence" in American education, as some have suggested, neither has it resulted in a sense of satisfaction that all is well.

There are undoubtedly many complex reasons for the failure of innovations to fulfill their promises. One such reason may well be that innovators have paid too much attention to isolated aspects of the innovation or the school—design of the innovation, for example, or training of teachers, scheduling, curriculums, media, to name a few—and too little attention to the school as an organization, composed of complex sets of interrelationships of people and nonhuman resources. In the view of an increasing number of educators, too often attempts have been made to implement innovations without realizing that certain interpersonal, intergroup, or structural aspects of the school environment would simply not support the change.

This chapter is a reprint of Newell's article originally entitled, "Organization Development in Schools" that appeared in American Education, 1973, Volume 9, Number 10, pages 28-32. That journal kindly donates its contents to the public domain. We reprint the article here as an excellent assessment of the state of the art of facilitating organizational change in schools in 1973.

(1971):

Richard Schmuck and Matthew Miles, two education researchers and advocates of this outlook, state the view succinctly: "Schools are primarily *organizations*, and many if not most efforts at educational reform have collapsed or have been absorbed without effect precisely because of the limited attention given to the organizational context in which reforms have been attempted." They point out that schools, as organizations, are characterized by a variety of individual and group behavior patterns which form the climate into which innovations are introduced. If this climate is marked by distrust, lack of commitment to the innovation, poor communication, intergroup conflict, unclear goals, ineffective decision-making, or similar behaviors, the chances for successful reform are considerably diminished, regardless of the quality of the innovation itself. The conscious or subconscious assumption by innovators that they can ignore these characteristics of the organizational environment yet still implement their reforms guarantees that their innovations will as best achieve but limited and temporary success.

Why the organizational context in which school reforms have been attempted has received so little attention is not entirely clear. Innovators in business and industry have been aware of the importance of this outlook for some time, and even though no one maintains that students should be "turned out" like automobiles or computers, proponents of an organizational approach to school reform do point to the fact that an educational system shares much in common with business and industry. Each is confronted with the problems posed by rapid change, growth in size and diversity, scarce resources, and the demands of consumers. Any organization faced with these problems must either adapt and grow or stagnate. And stagnation, taking the form of outmoded structures, rigidified procedures, disrupted communications, and sterotyped thinking, may ultimately lead to pronounced organizational ineffectiveness. Unfortunately, ineffective schools, unlike dying businesses, do not always fade from existence. Instead, they linger on to infect the lives of thousands of students to come, impeding learning and choking innovation. Schools need not, however, develop organizational hardening of the arteries.

How to achieve organizational health is, of course, the key question. One answer, suggested by such workers as Schmuck and Miles, is to be found in the relatively new field of organization development, more commonly referred to as "OD." Richard Beckhard, an early worker in OD theory and its application in business and industry and presently at MIT's Sloan School of Management, offters a useful definition in his work, *Organization Development: strategies and models* (1969): "Organization development is an effort (1) *planned,* (2) *organization-wide,* and (3) *managed* from the *top,* to (4) increase *organizational effectiveness* and *health* through (5) *planned interventions* in the organization's "processes," using *behavioral-science* knowledge."

It is this last part of the definition which is most descriptive of OD, for it is in its use of the behavioral sciences that OD departs most drastically from more traditional organizational improvement efforts such as time and motion studies and management by objectives. OD rests on the assumption, born out of sociological and psychological research, that organizational health requires an organizational climate characterized by mutual trust, open communication, and participatory decision-making. Only in such a climate can an organization hope to enlist the full commitment and energies of its members in the pursuit of organizational goals. Beginning with the pioneering work of the National Training Laboratories, an expanding body of theory and technique now provides practical means to translate the discoveries of the behavioral sciences into improved human interaction.

The behavioral science techniques used in OD vary considerably, although all proceed from two common basic assumptions: First, that employees are human beings, not parts of an organizational machine to be manipulated in order to make the machine run efficiently. OD advocates maintain that this concern for people does not conflict with management's concern for production, and that only as both concerns are met simultaneously will an organization make the fullest use of its resources. Second, that the organizational health toward which the behavioral sciences are employed is more than the mere absence of organizational ill-health. OD specialists aim their techniques at the attainment of positive growth, achievement of the fullest potential of the organization. The "self-actualization" of the school, not just the treatment of its problems, is the ultimate goal.

Using the behavioral sciences to improve the organizational *climate*, however, is only a part of OD which seeks also to improve the *processes* by which an organization operates. OD advocates are convinced that how the members of a system diagnose their problems, prescribe remedies, and implement alternatives is basic to the successful solution of these problems and equally as important as what the problems are. To meet this concern with process, OD uses a wide variety of techniques to improve the skills of organizational members in conducting meetings, analyzing problems, making decisions, implementing solutions, and resolving interpersonal and intergroup conflict.

If improvement of the organizational climate and processes is essential to a successful OD effort, no less fundamental are the requirements for a planned, system-wide approach under the direction of top leadership. OD recognizes that organizational change is a highly complex undertaking which cannot be approached extemporaneously or in bits and pieces. Systematic, scientific problem-solving is considered essential. OD also recognizes that changes in organizational behavior are more fundamental and thus more threatening and likely to encounter resistance than are more surface changes such as the installation of new equipment. If top leadership, in the person of the superintendent, principal, and members of their immediate staffs, is not actively committed, it may quickly abandon the OD effort at the first sign of staff unrest or outside pressure.

Educational applications of the basic OD theory outlined above are being conducted in a wide variety of settings. Universities, State departments of education, and Federal Government agencies as well as local school systems are experimenting with OD. Their efforts are beginning to form a nationwide mosaic of OD resources. A small sample of the range of these activities may be seen in the work of researchers at the Center for the Advanced Study of Educational Administration (CASEA) at the University of Oregon. For the past six years, CASEA specialists have been engaged in a series of interventions aimed at subjecting OD theory to the reality of schools.

☐ In August of 1967, almost the entire staff of a suburban Oregon junior high school, including the head cook and the head custodian, entered a six-day OD training session aimed at improving communication within the staff and at enhancing group problem-solving. During the first two days of the training, CASEA specialists focused on illustrating the importance of clear communication and collaborative behavior to effective school functioning. Exercises – the NASA trip-to-the-moon and the five-square puzzle, for instance – served as one training vehicle. In the latter exercise, five people sit around a table, each with a pile of puzzle pieces. No person has all the pieces to make a complete puzzle, the task of the exercise being to transfer pieces among the group until everyone has been able to complete a puzzle. The rules, however, prohibit talking or any form of gesturing, and no one may take a puzzle piece from anyone else; only giving of pieces to others is allowed. The exercise thus focuses attention on the importance of communication by demonstrating the frustrations that emerge when one is not able to communicate but is wholly dependent upon the observation and concern of others. Each exercise in the training session was followed by a discussion by the participants of what was learned and how this could be applied to improve school functioning.

The last four days of the training were devoted to the development of problem-solving and decision-making skills and their use on real school problems. The six-day training session was reinforced and extended in two follow-up sessions in December and February of the 1967-68 school year.

The results reported by CASEA from this application of OD to schools included a decrease in the teacher turnover rate; creation of a new vice-principalship aimed at facilitating change throughout the school; and an increase in the extent to which teachers saw the principal and themselves as able to make and apply better decisions, conduct more effective meetings, and facilitate more open communication. Of special significance, in terms of the goal of sustained self-renewal, were later reports of faculty-planned and conducted OD training and the spread of the new vice-principalship to other schools after withdrawal of the CASEA team.

☐ In April of 1968, after seven months of discussion with staff from all professional levels in the Kent, Washington, school district, CASEA trainers began a series of OD interventions aimed at developing a self-sustaining cadre of organizational specialists. This careful, prolonged beginning paid off in June of 1969 when, despite a tight budget, the district agreed to provide a half-time coordinator and ten days released time for members of an intradistrict cadre of OD specialists. Volunteers for the cadre were then solicited, with applications coming in from all types of district personnel. The resulting team, containing teachers, counselors, curriculum and student specialists, principals, and an assistant superintendent, then entered a two-week workshop to develop its own OD capabilities and make plans for the coming school year.

The potential of OD to help assure the success of innovations appears to have been demonstrated by one of the many interventions conducted by the cadre. In a series of four brief sessions which took place between August and November of the 1969-70 school year, the OD cadre, assisted by CASEA trainers, worked with an elementary school staff trying to implement a new multiunit structure. Training emphasized communication and problem-solving in an attempt to head off the difficulties bound to arise as a result of such a major change. The effectiveness of this application of OD was evidenced by later reports from the teachers that the innovation was being successfully introduced and that the OD training seemed to have played a significant part.

By March of 1970, according to CASEA, the Kent OD cadre had fully taken over the planning and conducting of OD efforts in the district—a satisfying sign that planned organizational change can become an ongoing process without continued outside assistance. Of added significance in this respect is the recent report that the cadre is still operating despite the superintendent having departed, many of the cadre members having moved away or having been replaced, and the district budget having been cut—events that have traditionally sounded the death rattle for innovations.

While these two examples represent but a small percentage of the types of OD activities in schools, they do serve to illustrate the outlines of a four-stage generic model of OD intervention. The first stage, usually called "*entry*," involves initial contact between the educational system and OD specialists followed by detailed negotiation to establish the conditions that will govern the OD effort. Clear communication, openness, and trust are considered essential at this stage to assure mutual commitment to ends and mutual agreement on means. The second stage of the effort, "*diagnosis*," consists of collecting extensive data from system members, analyzing organizational needs based on this data, and planning intervention activities to resolve the problems identified. Client system participants are the diagnosticians along with OD specialists at each step of this process. Most emphatically they are not merely survey respondents for whom a cure will be announced. This crucial point, OD advocates maintain, distinguishes OD from the typical school-consultant relationship that presently characterizes much of outside assistance.

Planned "*interventions*" represent the third stage in the generic model and may vary immensely in nature and purpose. Training activities may be conducted to improve communication, clarify organizational goals, alter systemic norms, resolve conflicts, and improve meeting, problem-solving, or decision-making skills. Intervention may also take the form of instituting structural changes in the organization, inviting outside consultants or trainers for assistance in solving specific problems of a technical nature, or training staff to form their own OD team, as in the CASEA approach in the Kent district. Continuous assessment and feedback are considered vital during the intervention to assure that OD goals are either being met or that strategies are being revised as necessary. The final stage of the model, "*withdrawal,*" sees the departure of the outside OD specialists and, if the effort has truly succeeded, the beginning of an internally operated system capacity for continuous self-renewal. The development of this capacity is perhaps the critical factor upon which the success of OD as a lasting reform strategy may ultimately rest.

It is appropriate here to note several dangers and misperceptions that OD must overcome if it is to fulfill its goal of facilitating organizational health. Perhaps the most serious threat to a fair test of the worth of OD is that it will join the already long list of educational fads that were touted as panaceas yet failed to deliver. The pattern is familiar: A new concept is proposed, a label is attached, a bandwagon begins to roll, an immediate "how to" prescription is demanded; the resulting "package" yields no improvement, the fad is discredited (to await "discovery" in another 20 to 30 years). This bandwagon behavior prevents the cautious and systematic development of theory and technique which alone can provide a solid basis upon which to judge the value of any innovation. To their credit, most of its advocates make a point of noting that OD is not a panacea, *the* educational wave of the future. Nor is it necessarily the only or entire way to facilitate organizational health. It is, instead, one way of improving the ability to find answers and to make these answers truly fulfill their promise.

A closely related problem OD faces is the misperception by many potential clients that OD is a packaged product, neatly assembled and ready for consumption the same way in every educational system. It is, instead, a body of theory and technique, by no means complete, which must be used carefully and differently according to the particular educational system and situation to which it is applied. OD advocates insist that it is not, nor should it ever be, a "teacher-proof" or "administrator-proof" prescriptive program of the type that many educators have come to expect from outside innovators.

While the more conscientious OD specialists are sensitive to the dangers of the "fad cycle" and the potential misperception of OD as a "package" and strive to counteract those trends, not all practitioners of OD in schools necessarily share this concern. As with other innovations, the formation of a group of OD "hucksters" bent on the hard sell is a distinct possibility. The problem has already confronted such conscientious groups as National Training Laboratories and may soon confront the OD-in-schools research community as a whole. Researchers may choose to ignore it, insisting that all their time must be devoted to their work, but they do so at the risk of having poorly trained practitioners give the field a bad name before it has even had the time fully to develop its theoretical foundation. Consumer education and professional ethics can be disregarded but the price paid may prove to be too high.

Another misperception of OD that threatens to retard its acceptance and development is the tendency of potential clients to confuse OD with sensitivity training. The result of this confusion is a false understanding of OD as an innovation that uses personality change and emotional encounters as its prime tools for change. This perception of OD quite understandably creates concern on the part of teachers and administrators who wonder if they will be forced to reveal innermost secrets or engage in highly charged interpersonal confrontations in the service of their schools. To counter this fear, OD practitioners note that the prime focus of OD is the improvement of groups, not individuals, and that encounter sessions of the Bob and Carol, Ted and Alice variety are by no means prerequisites to effective organizational change.

A final caution to potential OD clients is to avoid perceiving OD as a management tool to "adjust" individuals to the organization or spruce up the behavior of a recalcitrant school or department. OD seeks to move beyond existing organizational behaviors and structures and therefore demands a democratic not an authoritarian approach on the part of school system administrators. It cannot be "laid on."

Even if misperceptions such as these did not confront the developers and potential users of OD theory and technique, there would still be significant research and practical problems to be overcome to make OD applications effective in schools. Perhaps the most crucial research problem is the need to test and expand the framework of the OD generic model. Much remains to be learned about the entry, diagnosis, intervention, and withdrawal stages, and much that is already known experientially needs to be subjected to the rigors of experimental testing. Much current OD practice seems to rely on an intuitive sense as to what is called for in a given situation. To make OD as much science as art requires that confirmed hypotheses increasingly replace transmission of knowledge and skills by example and anecdote.

A significant aspect of this problem is the need for incontrovertible research evidence. The demand for accountability in education applies to researchers as well as to teachers and superintendents. Impressionistic evidence such as personal recollections and testimonials by satisfied clients will not be sufficient to convince potential users of OD in schools, nor should it be sufficient for OD specialists themselves.

What kind of evidence is needed? While laymen and some educators may insist on standardized test scores, OD practitioners, such as those at CASEA, contend that this is demanding too much, at least in the short run. They are convinced that the linkage between OD and improved student test scores is too indirect and rely instead on measures showing improved staff problem-solving, communication, use of resources, and assessment of progress towards goals. But while playing down the utility of test scores, they also caution against over-reliance on attitude surveys which are susceptible to "telling them what they want to hear" responses. Philip Runkel, a member of the CASEA team, argues for the necessity of using two or more independent measures for each of the variables in OD research as well as for the conduct of studies over long periods since educational change and its manifestations occur slowly. Whichever direction research takes, however, it is clear that OD specialists must find education equivalents for the profit and productivity variables used to measure the success of OD interventions in business and industry. This cannot be avoided if they are to gain the trust of educational managers who have been led astray by many past claims and who demand to be shown that OD does, in fact, lead to improvement in the learning of children.

Still another research problem confronting OD specialists is the need to develop alternative OD models that more realistically address the political confrontations with which school people are all too familiar. Change by consensus, upon which most current OD work is based, must be joined theoretically and practically to change through power and conflict. Related to this is the need to test OD theory in a wider range of school systems than has been the case thus far. The bulk of OD work in schools has been conducted in suburban, mostly white, mostly middle-class settings. It is essential to determine the validity of current OD theory in big-city, low-income, and minority settings and to provide the restructuring necessary to make it applicable in these situations. OD must also be applied to an increasing degree in university change efforts to determine its suitability at this level. Finally, OD interventions must more and more involve students as essential partipants in change efforts.

Turning from research to practical problems confronting advocates of OD in schools, the most serious may well be the difficulty of raising funds at the local level to implement an OD effort. Considering the facts that fixed costs constitute approximately 80 to 90 percent and sometimes more of most school budgets, and that taxpayers are not enamored of more innovations, it may be increasingly difficult in the years ahead to find available funds for use in OD. While some preliminary data indicate that the cost of OD in schools may be relatively low as far as innovations go, those interested in engaging in such an effort may well have to rely on the reallocation of existing resources or the argument that costs for OD represent "risk capital" which promises a heavy return at a later time.

Another practical problem is the need to tie OD to other innovative techniques or products being used in the schools. It is essential to remember that OD is a method of finding problem solutions; it does not assure that the solutions will be used or that they will work. For example, group consensus about the need to revise an existing curriculum does not necessarily assure that the revision will be instructionally and technically of high quality or that teachers will be more effective in using it than in using the old one. Similarly, a problem-solving exercise that results in the decision to improve system program monitoring will not indicate whether to use PERT (Program Evaluation and Review Technique), management by objectives, or some other planning tool. Nor will it give appropriate staff the skills necessary to establish the selected procedure in an effective way. OD as a process has its limits and must be married operationally to product-oriented measures such as PPBS (Program Planning-Budgeting Evaluation System), PERT, and operations research to name a few.

Finally, for the field of OD to be fully useful on other than a small research basis, professionally competent OD specialists will have to be trained. While this may be done through the CASEA cadre approach, other methods either exist or can be devised. (In this latter respect, the Managers of Educational Change Fellowship program recently initiated by OE's National Center for the Improvement of Educational Systems is an example.) It will also be necessary to create and expand networks of OD resources (people, places, materials, and the like) and make these known and available to OD clients.

Given the various assets and liabilities attached to the use of OD in schools, it is tempting to tote up a balance sheet on this new concept for change. This would, however, be deceptive and premature. While the emphasis on organizational norms, roles, and group dynamics as key variables in educational innovation is a highly significant step in the conceptualization of educational change, and while OD can offer some useful techniques now, considerable developmental work is needed to make this approach fully effective. This should not, however, in any way deter increased attention to one of the few change strategies which offers the potential of ending the cycle of frustration in educational reform. OD is aimed at achieving the continuous self-renewal of educational systems. To the extent that it succeeds, we may yet escape the observation of French satirist Alphonse Karr, recently echoed for education by Seymour Sarason in *The Culture of the School and the Problem of Change*: "The more things change, the more they remain the same."

(1971):

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Chapter 2

EVENTS: THE KENT PROJECT AND THE TRAINING

Wyant

(final)

One day in August, 1967, a junior high school counselor from Kent, Washington, sat in our office telling us what a mess his district was in. Enrollment was climbing crazily, new top administrators had been hired but nobody knew what they were supposed to be doing, it was next to impossible to get a clear message from anybody about who was responsible for what, and teachers and administrators seemed to be at each other's throats all the time. He had heard of our work in a college course earlier that summer, and had persuaded the administration to let him seek our help in straightening things out. By the end of that day he had agreed to urge the superintendent to get in touch with us. We had taken the first step down a path that was to fill the next five years with the joy and pain, discovery and disappointment, exhilaration and frustration of our biggest project for organizational development in schools.

This chapter tells the story of organizational development for self-renewal in the Kent school district from August 1967 to April 1972, and of the research project built around interventions by CASEA and the cadre of organizational specialists we helped to create. The story is divided into five parts. The first covers the series of negotiations with top administrators and other leaders that occurred between the August meeting and April 1968. The second covers the training of school staffs and administrative groups from April 1968 to May 1969. The third tells about recruiting and training the cadre of organizational specialists in the spring and summer of 1969. The fourth describes the activities of the specialists in the ensuing years. The final section briefly described data-collecting and research during the course of the project. The narrative is augmented by descriptions of training and other events in several appendices.

Entry and Diagnosis

(August 1967 to April 1968)

The Kent project resulted from a happy coming-together of Kent's interests and ours. The district obviously needed help in sorting out its many problems, while our research team was eager to test our theory of laboratory training for organizational development in schools in a large-scale, long-term field research project. We wanted, too, to develop a more finely-honed technology.

Why Kent Was Ready

In the mid-sixties Kent was riding the crest of a spectacular economic boom, and with the boom came a population explosion that all but swamped the schools' abilities to absorb new students. The town of Kent, located in the Green River Valley about 25 miles southeast of Seattle, had long been a minor agricultural town; as late as 1960 -- when a large dairy-farming area was annexed to the town -- "Kent has more cows than people" was a standard joke. Industrial development pushed into the valley early in the sixties as the Boeing aerospace complex established its Space Center near Kent and local electronics manufacturing firms became multimillion dollar giants. Tendrils of freeways entwined the Green River Valley as the seemingly never-ending expansion of new industry rushed the Seattle megalopolis toward Kent.

As the town grew from 9,000 in 1960 to 14,000 in 1967, enough children entered the school system to fill a new classroom every week. Enrollment rose from 5,500 in 1960 to 9,500 in 1966; the district's assessed valuation rose from next-to-lowest in the state to fourth-from-top; its program budget jumped as much as 28 percent in one year.

Practice had not caught up with population, and in mid-decade the district was still administered by the superintendent and two assistants even though the instructional staff was growing by 18 percent each year. In 1966, the district's eleven elementary schools, three junior high schools, one high school, and 340 teachers were spread over the 71-square-mile district, geographically the second-largest in the state.

Unable to cope by itself with the problems of massive growth, the school board hired Booz, Allen, and Hamilton, a management consulting firm, to forecast growth through 1975 and to recommend appropriate responses. The consultants found confusion in the central office, fragmented curriculum development, and neglect of other organizational functions. Forecasting a doubled enrollment within ten years, the firm recommended an immediate expansion of the top administrative staff, to be followed by a similar expansion in teaching staff and facitities.

Six top administrators were hired, statements of policy principles and job descriptions were duly adopted by the board, and school sites were purchased. But as the district tried to carry out the firm's recommendations, problems of confusion and mistrust were only aggravated. In interviews with us, district personnel freely told of power struggles within the administration, communication channels that were clogged with trivia while important information was never shared, contradictions and confusions in memos from different parts of the central office, and profound mistrust of the administration's trustworthiness and intentions. The consultants' report itself was a source of aggravation, one which many teachers saw as a $70,000 boondoggle and simply another example of high-handedness on the part of school board and administration.

After the Booz-Allen-Hamilton report was finished, the Booz-Allen-Hamilton staff did not remain to give any technical assistance in how to make use of the report. All in all, the 136 page report gave the district a prescription for solving its problems, but it did not give people a way to turn the prescription into specific new behavior and relationships. The plan provided statistical speculation about population growth and planning needs, but it did not provide Kent educators with ways to cope with the uncertainties and frustrations that are inevitable in major organizational change. The report contained fine-sounding declarations of the need to improve relationships, while most teachers and principals felt they had been all but ignored by the administration and consultants. It was at this point that the counselor heard that we had strategies for coping with problems like these.

Why We Were Ready

The Center for the Advanced Study of Educational Administration

(CASEA) was one of several research and development centers set up by the federal government in 1964. Its mission was to focus on the "social context of educational administration and organization," and by the spring of 1967 the CASEA management had determined to begin a program to support interventions in schools and districts to discover reliable strategies of organizational change. That summer, Richard Schmuck joined the staff of CASEA and brought with him a commitment from the principal of a junior high school in Beaverton, Oregon to begin a project with his faculty for improved problem-solving. (That project has been described by Schmuck and Runkel, 1970; see bibliography.) When the counselor from Kent showed up, we saw Kent's request as a grand opportunity to extend our work from a single school to an entire district, and we enthusiastically turned to marshalling our resources, making agreements with other agencies, and speculating on the types of interventions and research strategies we might pursue.

Negotiations with the Cabinet

The Kent administration's ambitions, at first limited to a short training session for top administrators and leaders of the local education association, expanded considerably as a result of discussions with us during the rest of 1967.

Schmuck and Runkel visited the district in September 1967 to interview top administrators (collectively known as the superintendent's cabinet) and to discuss the proposed collaboration. The cabinet members expressed a strong desire for some form of helpful consultation for themselves, and agreed to write a Title III ESEA proposal and to write a set of goals. We agreed to survey resources that might be committed to the project and to begin designing training and research activities. The interviews generally confirmed impressions of confusion in roles and goals, inabilities to make and carry out decisions, and difficulty in integrating new with old staff members.

The cabinet worked intermittently at forming its goals during the fall, and in November presented Runkel and Schmuck with a list of six goals. The goals generally suggested that improved interpersonal relationships among top administrators would lead to increased problem-solving effectiveness among teachers. As we perceived them, the major concerns of the cabinet were to improve the clarity and stability of decision making, to upgrade the management of conflict within the cabinet, and to establish freer channels of communication among all parts of the district. (A more detailed description of our diagnoses of the district, and the various sets of goals that were stated during this time are given in Appendix A.) In addition, we perceived tension between nearly all parts and levels of the district. This tension was created in part by the relative isolation of units from each other resulting from the district's rapid growth.

Meanwhile, we formulated our own goals for the project in organizational and social-psychological terms that reflected our theories about organizations and change as well as our view of the district and its problems. We planned to use these goals as well as Kent's own goals in guiding the direction and progress of the project. We decided on the following seven goals* to serve as guides for designing interventions, explaining our purposes, forming hypotheses, and assessing our effectiveness during the project:

1. to increase understanding of how people in various parts of the district affect one another
2. to develop clear communication networks up and down and laterally
3. to increase understanding of the various educational goals in different parts of the system
4. to develop new ways of solving problems through creative use of new roles in groups (such as changing the role of group leader to make it more effective)
5. to develop new ways of assessing progress toward educational goals
6. to involve more people at all levels in decision-making
7. to develop procedures for searching for innovative practices both within and outside the school system

Some firm agreements about the nature and copy of the project emerged from a second meeting between Schmuck and Runkel and the cabinet in late December 1967; by this time the administration's view had come to resemble our own. It was agreed that the project would last at least two years and would include potentially all the district's employees, and that the focus would be on improving the self-renewing capacity of the district rather than simply improving interpersonal relationships among designated leaders. The tentative schedule called for a round of training events for administrators and other leaders during the 1967-68 year, to be followed by training for school staffs in the 1968-69 year. We stressed our intention to view the project as an occasion for developing knowledge and empirical data, rather than as a service project for one district. Within the next few weeks we obtained agreement from top administrators in the neighboring Auburn and Federal Way school districts to allow us to collect questionnaire data for comparative analyses.

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* As our theoretical thinking developed in ensuing years, these goals, originally conceived by Schmuck, were revised to become a list of immediate objectives for organizational development. The revised list serves as some of the chapter headings in the Handbook by Schmuck, Runkel, and others (1972). Some discussion of the evolution of our theory appears in Chapter 3.

With this formal agreement between CASEA and the Kent administrative cabinet, the project was launched. Over the course of more than four months we had made entry at least into the top level of the district, had begun plans for conducting a major research and training project, and had gathered initial impressions of the multitude of problems besetting the organization. Harder tasks lay ahead for us in the second part of the entry phase, as we still had to secure approval for the project from other influential groups such as Kent's educational association and the principals. We also had to conduct more detailed diagnostic interviews with a wider spectrum of the district's employees. And finally, we had to collect the first wave of questionnaire data.

Extending the Entry Process

We had made an agreement with top administration, but that gave us no guarantee of understanding or support from other powerful groups, notably the Kent Education Association (KEA) and the principals;

and we certainly did not want to repeat the Booz-Allen-Hamilton consultants' mistake of ignoring these two groups.

Senior program members met informally first with principals and then with representatives of the education association in mid-January, 1968. In both short presentations, we outlined the history of the project to date, reviewed our seven goals, described briefly the procedures and methods of organization development, and announced the tentative schedule for the first few events. The two short meetings went well in our opinion; all but two principals and all but one KEA representative voted approval of the project. The meeting with principals was helped by one administrator who asked whether they really had a choice; we replied that they certainly did. And we meant it.

A crucial boost to the project came the following month (February) when the school board voted to support the project financially even if the expected Title III proposal was turned down. Later that spring it became obvious that we would not get Title III funds, and several inquiries to private foundations proved fruitless, so without the board's action we could not have continued.

At the suggestion of the language arts coordinator -- a person who gave us a great deal of help in the early stages and who was later to become the cadre's first coordinator -- we formed a steering committee as a local liaison. The committee included representatives of several parts and levels of the district. While it nominally had power of approval over our training plans, and did serve some local liaison function, the committee was never a very significant force in the project.

The formation of the steering committee was spurred by our experience with an administrator we had first tried to use as liaison, but who did a poor job of getting needed information to others in the district. The difficulties of getting simple information like times and places for data collection were to plague us throughout. The administration amply demonstrated that it did, in fact, have communication problems!

Further, we were to discover again and again that hearing our presentations was no guarantee of understanding, that a raised hand on a vote of approval for the project did not signal trust of us or commitment to the project goals, and that approval by the leader (or leaders) of some group was not the same as understanding or acceptance by others in that group. (The administration of the questionnaire the following month was typical of the problems we encountered; details are described later in this chapter and in Chapter 13.)

Even so, we at least had presented ourselves to powerful groups and sought their reactions, and with this step taken we moved on to the tasks of gathering diagnostic and research data and designing the crucial first event.

Diagnosis Preceding the First Training Event

CASEA representatives interviewed 50 members of the district, inculding representatives from all professional groups, in March 1968. Recurring themes in these interviews confirmed and expanded on the problems we had heard from administrators in our earlier discussions.

The people we talked to repeatedly expressed doubts and confusions about the roles, responsibilities, and intentions of the newly-expanded cabinet. Decision making remained a mystery that created mistrust as employees heard confusing and even contradictory reports from different parts of the central office. Official communication channels were too clogged with trivia to allow important information to get where it was needed in time to be useful. The district's rapid growth and other problems had produced pervasive feelings of isolation, impersonality, and tension, with obvious polarization on nearly all possible dimensions -- line versus staff, new versus old, teacher versus administrator, and so on. These tensions were aggravated by the district's chronic uncertainty about money, since it had to go to the voters for nearly half its operating budget each year. Finally, our own role and intentions were likewise suspect, with several people perceiving us as either yet another management consulting firm or as information runners for the central office. Yet, our interviewers felt that enough people had been candid enough to provide useful information for planning the first major event.

Training for Administrative Groups

(April 1968 to December 1968)

We carried out four training events for district personnel with key line and staff functions between April and December 1968. (We use "line" to mean those who are part of the direct chain of command in the system from the superintendent on down; we use "staff" to mean those who advise or assist line personnel in the chain.) In these events, organizational development training reached all the top administration, principals, leaders of the education association (KEA), and the school board. We know that some changes in individuals can be attributed to these training events (see Chapter 5), and we think that some parts of the organization were changed by them. These events had three beneficial outcomes. The first was that they provided a large number of the district's employees with experience in the strategies and activities of laboratory training for organizational development. The second was increasing the readiness of many members for the later training by us and Kent's cadre of organizational specialists. Third, they interested a number of people who later joined the cadre.

First Event: Key Line Personnel

The first event was a week-long laboratory on April 7-11, 1968 that involved nearly all district personnel who held key line positions, including central office administrators, principals, and leaders in the KEA.

We believe that our decision to train key line personnel first was very important. We did not want merely to train top administrators because we did not want to make those in lower echelons feel that we thought administrators' roles were more important than their own. On the other hand, we did not want to train a heterogenous group randomly chosen from all levels of the organization because we wanted, from the beginning, to take organizational structure into account. Our solution was to begin by training the "backbone" of the organization, the key line personnel from the superintendent on down. In this way, we were able to maintain the structural visibility of the organization and highlight problems that groups or subsystems in the organization might have with other groups.

Our goals for the training event were to establish widespread understanding and favorable attitudes about organizational development, to identify intergroup problems (especially across hierarchical levels) that would provide the content for subsequent training in communication and problem-solving skills, and to establish norms for collaboration within and across the various participating job groups. We hoped, too, that identification of intergroup problems would spur a desire for further training. Our general strategy for the event was to bring together the various job groups in an "imaging" exercise that allowed each group to tell the other groups about the organizational problems they perceived to be plaguing their attempts to collaborate. We augmented this focus on substantive issues with training in communication and problem-solving skills and attention to a variety of other issues, such as influence and decision making. With the superintendent's cabinet, especially, we focused on intra-group issues in communication, norms, and influence.

Our training staff consisted of Dick Schmuck and Phil Runkel along with six graduate research assistants and a local trainer named

Don Murray. A staff member of the state education association and fellow of the National Training Laboratories, Murray had considerable training skills and enjoyed a great deal of respect from teachers and administrators in Kent and elsewhere in Washington. He later conducted short training sessions for the cadre.

Participants [illegible] the event included the nine members of the superintendent's cabinet, present throughout the week; 21 building administrators, who attended part of the event; and 29 teachers, including elected officers of the KEA and at least one teacher from every building in the district (these attended for two days only). In all, some 65 persons received training in the first event.

On the first day, we and the superintendent's cabinet examined ways in which communication was breaking down among them, confusion in their roles, ambiguous norms of the cabinet, and their own resources. At appropriate times during the day, the cabinet members practiced skills in interpersonal communication.

Principals joined the cabinet on the second day for the imaging procedure to exchange perceptions of organizational problems. We divided the total group into three units: cabinet, elementary principals, and secondary principals. Each group first worked alone and listed their impressions or "images" of the other two groups. These lists focused on helpful and unhelpful work-related behavior of the other two groups toward their own group. This phase ended with a brief period of training in the communication skills of paraphrasing and

and describing behaviors; these skills were to discipline the next phase. Next, participants formed a "fishbowl" arrangement with one group sitting in a circle surrounded by the other groups. Participants in the outer circle read aloud the descriptions they had written of the inner group, and a member of the inner circle paraphrased each one to make sure the description was understood. Each group in turn occupied the inner circle and heard the descriptions of it by the other groups. The groups then separated, and each, again working alone, considered its own behavior that gave rise to the impressions reported by the other groups. Finally, the three groups came together again to reveal the behavior they had recalled about themselves. They did this using the same format and procedures as in the previous round. We hoped that one of the outcomes of this event would be to facilitate the participants' abilities to confront one another about differences in the future.

The KEA representatives (mostly teachers) joined the laboratory on the third day. After some training in communication skills, problem solving, and the use of organizational resources, the three groups went through a modified imaging procedure; this activity culminated in a meeting in which the participants identified the major organizational problems they thought existed in the district. The principals then departed, while the cabinet and teachers remained to examine relationships between the two groups.

Only the cabinet remained for the final day, and we held an unstructured discussion with them on problems of role clarity and communication within the cabinet. Finally, the cabinet scheduled some dates for further work. See Appendix 2-A for further details of this five-day event.

The primary theme of the first event, in sum, was that of uncovering organizational conflicts in a confrontive yet constructive way as a necessary first step for making organizational improvements. Some quantitative data (see Chapter 5) indicate that we had some success in helping the participants openly and constructively confront each other. Further, we think the event was crucial in building supportive attitudes in favor of organizational development among key district personnel: most participants said they looked forward to more OD training, none refused to allow later OD consultation in subsystems in which they had prominent membership, a few made specific requests for training their subsystems, and seven later became members of the cadre.

In all, we view this event as a success, both in opening up some long-standing organizational conflicts for examination and systematic problem solving and in building the support needed to continue effective OD consultation in the district.

Interlude 1: Summer 1968

We conducted no training events during the summer of 1968, but three events that affected our later training did occur.

First, all principals in the district attended a basic human relations laboratory in June, with Dick Schmuck as one of the trainers. We encouraged their participation in the hope that the laboratory would increase principals' skills and readiness for our later training in their schools. On the whole, though we now feel that the exposure to sensitivity training probably compounded our problems because our style of training was confused with their experience in the human relations laboratory.

Second, all the district's administrators and subject coordinators attended a five-day workshop in management by objectives in August. Mostly due to the hard-charging new assistant superintendent for evaluation, one of the district's major emphases during this time was management, supervision, and instruction by objectives. While we have no systematic data on the effects of this effort, the impressions we have gleaned from interviews and other reports are that this administrator's personal style proved abrasive to many colleagues, and much of the teaching staff's resentment toward the administration focused specifically on his efforts to introduce systematic evaluation in the district.

Third, members of the district's new high school joined with the staff of a high school in a neighboring district for a 16-day workshop conducted by professors from one of the state colleges. The first part of the session was a sensitivity-training session focused on communication and team-building, while the second part was built around issues of team teaching and innovative instruction. In our subsequent training in the school we generally regarded that staff's experience in sensitivity training as a large obstacle to our own efforts. Although the departmental groups in the new high school came away from the sensitivity training with strong in-group allegiance, they exhibited no skills for coordination between groups; in fact, their in-group cohesiveness seemed to inhibit cross-group collaboration, raising competition instead and generating invidious comparisons and distrust.

Second Event: Key Staff Personnel

Our second major training event was a three-day laboratory for some 70 members of the departments of Student Personnel and Curriculum. The Student Personnel Services division included counselors, social workers, psychologists, physicians and nurses. The Curriculum department was composed of subject-matter coordinators, reading specialists, speech and hearing therapists, and directors of curriculum-related services. This laboratory (like the April event) was conducted away from the district, in a mountain lodge used for seminars and training events.

Our intentions -- similar to those for the April laboratory -- were to use the imaging procedure as the major vehicle for generating information that could be used in systematic problem solving on organizational issues within and between the two departments. The district's principals were invited for a half day to join the imaging.

When the participants arrived, their first task was to set their own goals for the three days. Their goals involved improving communication, clarifying roles, strengthening coordination between the two groups, and examining their norms. Our design was more or less followed early in the laboratory, until tensions within each department required immediate alterations of the design, with the result that we were left with too little time for systematic work on the relationship between the two groups.

During the first day, participants were trained in communication skills and met in small groups to discuss group processes, the progress of the laboratory, and the helping and hindering behavior of individuals. The trainers noted that a high level of tension existed among the participants, that both groups seemed dominated by their formal leaders and a few other aggressive members, and that participants were subtly coalescing into "sensibility" versus "organizational" training factions -- a split that was to divide the group the next evening.

On the second day, the morning exercise was "Planners and Operators." The group was divided, as specified by the exercise, into those who were to give instructions and those who were to carry them out to solve a simple puzzle. This exercise surfaced problems of communication, dominance by a few people, and disorganization within each department as the divisions continued to work separately. That afternoon, participants went through other exercises that focused on the structure of each division, and relationships based on communication, interdependence, and power. Debriefing these activities in the Student Personnel Services division brought into the open the confrontation between the director and one faction of the division, while another faction clearly wanted to avoid a tension-filled confrontation. It began to be obvious to us that the members of this diverse group did not function as a single subsystem when we saw the readiness of the subgroup to divide itself from the main group. The problems of identifying functional subsystems will be discussed in Chapter 3.

We abandoned our plans for imaging between the two groups that evening; instead, we agreed to allow the Student Personnel Services division to continue work on the problems raised that afternoon. About half the division's members dragged the director into a fairly unstructured confrontation, while the remainder worked on organizational issues using our problem-solving sequences; but both groups dealt with essentially identical issues. We were later told that the confrontation had been helpful, with changes on the part of both the director and the disaffected staff members evident. Meanwhile, members of the Curriculum division indecisively worked at building an agenda for the evening until one faction forced the others into a small imaging exercise. Their stumblings during the evening clearly brought to light problems of dependency upon authority, inability to make decisions, and reluctance to confront conflict openly.

When the principals joined the laboratory on the third day, we put the imaging procedure into motion, but it was largely unsuccessful. One dynamic we noted was that the principals came bounding in exuding the skill and confidence in the imaging prodecure they had gained in April. Their expertness contrasted sharply with the stumbling efforts of the two central-office divisions, and the exercise became almost a game of one-upmanship on the part of the principals. That afternoon, the two divisions (without the principals) worked at organizational problem solving on issues that ranged from the conduct of meetings and delivery of services to relationships among hierarchical levels.

During the concluding general debriefing, participants reported a number of favorable reactions. They described as benefits of the laboratory: learning some skills and applying them, generally closer and more open relationships with colleagues, and taking some tentative steps toward change within the divisions. The trainers later reported that the major weaknesses they perceived were: an insufficient amount of training in skills, not enough attention to the relationship between the two divisions, and a slow and dragging pace throughout the workshop.

The laboratory received a good review in the district's newsletter, and Student Personnel Services division members reported that many issues raised during the three days were still being worked on several weeks later, but the members never carried out plans for follow-up training. After a survey of the two divisions' members by the directors, we were informed in December that they had decided to commit their energies to determining behavioral objectives, in accord with the district's emphasis on Management by Objectives. For more detail on this and other training events with administrative groups, see Appendix 2-A.

Third Event: Board, Administration, and KEA.

The third event grew out of a minor crisis that later assumed major proportions and occupied a good deal of the district's energies during the 1968-69 school year. Some social studies teachers at one school had invited a speaker from a radical left political party to address their classes. On the scheduled day, a flurry of telephone calls convinced the assistant principal to cancel the speech. KEA leaders perceived this event as yet another instance of high-handedness by the administration and school board, and asked us to act as consultants and mediators during a meeting between them, the cabinet, and the school board. We hoped to seize the occasion to introduce problem-solving skills and procedures to the participants.

The cabinet, the school board, and several teachers and principals met on the evening of October 9 to begin the problem-solving sequence in mixed groups, each group containing representatives of all four kinds of roles. This meeting clarified a number of issues, and several persons agreed to confer on ways to prevent this sort of contretemps in the future.

The following day, the administrators met alone and continued, more or less, the work on problem solving. A great deal of discussion ensued about interpersonal relationships among administrators. The personal styles of two of them became an issue in this discussion. We perceived the major benefits of the event to be a somewhat higher level of trust among cabinet members (with the superintendent, especially, feeling greater support), and the sharing of some feelings and perceptions. On the whole, though, we do not regard it as one of our more significant training events. Although the training achieved some clarification of the conflict, the participants did not seem to perceive this kind of meeting as a means for solving problems in the future.

Fourth Event: Business Division

Our final event for administrative groups was a two-day laboratory in December 1968, for the head of the business office and six department heads within the division. Beginning with some training in communication skills and an exercise in group processes, the participants moved on to systematic problem solving on issues within the division and between it and other parts of the district. The participants worked rather fitfully and unskillfully at the tasks, although they seemed pleased with the two days' activities by the end of the workshop. A survey of the division's members in the spring of 1969 showed that most members felt communication had been improved by the introduction of weekly meetings and more informal contacts among divisional members, but we think the results of this laboratory were modest at best. Our opinion that the training had produced little increase in openness of communication was reinforced a year later when almost everyone in the district was completely surprised by the discovery that the district's financial books were severely out of balance. We shall describe later the financial crisis that resulted.

In Summary

The four events we conducted for administrative groups varied widely in their nature, scope, and effects. None can be called thoroughly unsuccessful, though the first two probably had greater helpful effects than the last two. Nearly all central office professional personnel were involved in at least one event, the district's principals were part of two, and representatives of the KEA and each of the district's schools were involved in the two major events. Our belief is that some useful organizational changes can be traced to these events (albeit probably on a smaller scale than we had hoped), and that they certainly increased the readiness of various parts of the district for the subsequent training by us and the cadre of specialists, and this latter result was important. Several people who participated in these events later became cadre members, while others turned out to be supportive participants in subsystems which the cadre trained. We had demonstrated the nature of training for organizational development to a wide spectrum of the district's employees, and many of them experienced personal and organizational benefits from the training. By the fall of 1968, our focus had shifted to the schools, and the beginning of interventions for school staffs were under way.

Interlude 2: Turmoil and Change

The effects of political disturbance and educational change were evident in Kent as we began training school staffs in the fall of 1968. First, much of the administration's energy was devoted to forming policies that would lessen the pressure put on it by the more conservative segment of the Kent community. Second, the district launched a number of innovative programs that affected our work. Meanwhile, the area's economic boom continued at a feverish pitch, although signs of an impending collapse had begun to appear by mid-year.

The entire political and educational system seemed under attack in 1968, as television and newspapers brought Kent citizens reports of the student takeover of Columbia University, the riots that followed the death of Martin Luther King, Jr., the New York teachers' strike over Ocean Hill-Brownsville, the "seige of Chicago" at the Democratic National Convention, and so on. In Seattle, several schools in the predominantly black Central Area were closed following student demonstrations (at least one centering around the appearance of Stokely Carmichael).

Much of the Kent community was deeply conservative politically, and the school district had been periodically attacked by right-wing groups on such issues as sex education, psychological testing, and counseling practices. When the crisis over the scheduled speech by the left-wing political candidate (the impetus for our third training event described earlier) erupted, it marked the beginning of a year-long controversy. The KEA, the administration, and a group called the Citizens' Advisory Council held meetings all year long to create a policy on controversial speakers that would satisfy all segments. Also, the long-standing battle over sex education flared up again, and by the end of the year the Advisory Council was thoroughly dominated by opponents of sex education. (One team from the newly-formed cadre later tried to give some training to the council, but little came of it.)

The growth of the district continued at a rapid pace as the new high school opened in September 1968, two new elementary schools opened during the year, and three more elementary schools were in various stages of design or construction. All the new schools were designed to accomodate more collaborative teaching arrangements and more flexible instruction for students. Kent claimed to be the first district in the Northwest to start using team teaching in elementary schools, and two older schools were remodelled to accomodate teaming. Still, several elementary schools were double-shifting to handle the overflow of students. Also, the district hired instructional aides for teachers for the first time. The administration embarked on an ambitious program of management, supervision, and instruction by objectives.

Against this background, we began work with the staffs of five schools in the fall of 1968.

Except in Chapter 11, we shall say little more about effects of these training events on central office and KEA personnel. We believe that this training was an important part of the entry process in the Kent district and helped to acquaint many people with the nature of our work. We believe the training with the superintendent's cabinet played an important part in enabling the cadre of organizational specialists the next year to work out a radically new format for the weekly meetings of the cabinet (this will be mentioned again in the section on "Work with Administrative Groups" below and also in Chapter 12). But we did not follow any central office group, nor the KEA as such, through enough occasions to plot changes with confidence, nor were we able to identify sufficiently comparable departments in the two comparison districts to give us confidence in making comparisons with untrained central office departments. Most of this book will discuss the effects of training in the schools themselves -- training done either by us, by the cadre of organizational specialists, or by both.

Training for School Staffs

(October 1968 to May 1969)

We gave training to all or part of the staffs of two elementary schools, a junior high school, and two high schools during the 1968-69 school year. Our crew of graduate research assistants was divided into five relatively autonomous teams to gather diagnostic data, feed the data back to their clients so that both groups could jointly establish intervention goals, and carry out the training. Our belief now is that rather little systemic change resulted from these events though some sub-groups within the schools were strengthened. Perhaps the greatest benefit was a heightened readiness for later training by the cadre; many of the specialists who made up the cadre came from these schools, and all but one high school received cadre training in OD.

While all the schools in some sense "volunteered" for the training, we and the district's administrators made the initial selection of the schools to be trained. We then conducted conferences with the school principal and with the staffs, again emphasizing our intention for participation to be voluntary, but it was clear that a good deal of the "volunteering" was a response to the administrations's request that the schools "cooperate." We did keep the back door open, however, and some of these schools dropped out of training before we, ourselves, would have terminated the projects. As to entry, we found that it was difficult to make entry into most of these five schools, and feelings of resentment against our intrusion interfered with much of our work.

School K05

This was an older elementary school. It was chosen because we thought the staff was committed to team teaching arrangements. The building was extensively remodelled during the 1968-69 school year -- at a cost approaching a quarter-million dollars -- to create large open areas. We soon discovered, however, that teaming was not the predominant mode of instruction, although the staff was loosely organized in teaching units, nor did the staff as a whole expect actually to be teaching in teams in the near future. The staff's major concern during the year was trying to work around the construction crews working on the building

Our trainer interviewed the principal and introduced the staff to our project in late October, and returned to interview teachers in mid-November. The staff included 20 teachers, four aides, and five part-time specialists; the school had approximately 725 students. The interviewers discovered that while most teachers felt good about the principal and the school, they experienced problems in making decisions and in bringing problems to the attention of the faculty, and were unable to coordinate their work effectively. The principal felt that the major restraining forces were teachers' lack of skill, experience, and commitment, as well as problems in authority relations between himself and the staff. An inability to acquire needed resources, assistance, and direction from the central office also seemed to be a major obstacle.

When our team visited the school in January 1969 to report the results of their interviews and to set intervention goals jointly with the staff, the faculty seemed unprepared for the meeting and in fact unaware that it was scheduled! During the meeting our crew noted an obvious division between older and younger teachers that made collaboration difficult, and a widespread lack of clarity about the overall direction of the efforts of everyone.

When two members of our crew talked informally with the principal in February, he admitted that he was reluctant to start the training and gave the continued disruption from construction crews as the reason. Nevertheless, we scheduled a date for training, and agreed to emphasize communication skill development as a step toward strengthening the faculty's problem-solving abilities and the team structure. We thought some training, even if brief, would be valuable as a prelude to further work by the cadre or as preparation for the faculty's participation in a workshop on team teaching scheduled for that summer.

At what turned out to be the only training event we conducted for this school, the morning was spent in practicing communication skills while trying to reach consensus on the school's goals. In the afternoon, the faculty was divided into two groups, and each did a role-playing exercise on the issue of bringing problems before the faculty. The total faculty then got together to role-play a situation that focused on relations between the principal and the staff. Finally, staff members listed on large sheets of newsprint forces that helped or hindered effective teaming. These poster-size lists were then displayed on the wall.

Some staff members complained of the "artificial" nature of the day's activities, but the staff as a whole seemed genuinely enthusiastic and pleased with its accomplishments during a "force-field" analysis, in which they listed forces working against their problems' solutions and forces facilitating their solutions. Interest in future work with us was expressed, but no definite plans were made. Ultimately, no other training events were conducted.

We learned from informal conversations with the principal later that year that the staff had made good progress toward strengthening teams, had begun work on curriculum development, and had initiated a school-wide faculty council. He grudgingly allowed us "fifty percent of the credit" for the faculty's progress, but saw no further need for our services. The staff did, however, receive a small amount of additional training from the cadre.

We were never particularly pleased with our training for this school. We repeatedly sensed a moderate animosity from the principal. (We later learned that the principal refused to let one of his teachers, a member of the cadre, make time for cadre duties during the school day.) The school received the least amount of training of any school in the district, and rather consistently appears low on our quantitative measures of outcomes (see chapters 6, 8, 10 and 11).

School K11

Under construction most of the 1968-69 school year, school K11 was the first of the district's new "open concept" elementary schools. The central feature of the building was a large resource center, and the teaching wings had movable interior walls.

Meanwhile, the staff was housed in a nearby older school -- and was double-shifting with the staff of that school until March 1969. When we first made contact with the staff in October 1968, we discovered that teaching teams had not yet been formed -- contrary to what we had been led to believe. (The discrepancies in information we received from different parts of the district never ceased to amaze us!)

From our interviews in October and November 1968, we learned that conflicts between line and staff were acute in the school. Specialists in the building were unsure whether they were responsible to the principal or to their central office supervisor. We also learned from our interviews that there was widespread uncertainty about how to go about setting up teaching teams especially because the principal was said to provide little direction, and several individuals were perceived as disruptive. Role clarity, decision making, and communication channels were all confused. There seemed to be substantial anxiety about undergoing our training; we were later to learn that many staff members perceived our intervention as something imposed on them by the central office.

When we next met with the staff later in November to rank their concerns and establish intervention goals, we saw factions and coalitions form to advance the interests of parts of the staff. Our goals for the first scheduled intervention, in December, were to introduce the staff to our methods, get them to start looking at their own behavior, and begin work on a problem-solving sequence.

Staff members did begin to discuss their own processes as the first event led off with a consensus exercise. Feedback on helpful and unhelpful behaviors was shared in grade-level groups, while we introduced and modelled communication skills, and the total staff then formed a fishbowl arrangement (an inner circle of speakers surrounded by an outer circle of listeners) to discuss ways of encouraging helpfulness among staff members. On the second morning, three heterogeneous groups began problem-solving work on issues of setting up teams, bringing problems to the faculty's attention, and using resource persons effectively. A quick debriefing of the day-and-a-half event brought predominately favorable reactions to our work.

Part of our crew met with the staff in February 1969 to review progress since the December event and to plan the second training session, scheduled for March. Staff members reported some specific events that signalled progress, and we agreed that the focus of the March training would be problem solving by individual teams.

The laboratory in March opened with an exercise in one-way and two-way communication, but most of the day was spent in problem solving by the teams. Finally, team representatives formed a fishbowl to review their day's work and to discuss future involvement with us. This activity produced no definite plans for further work by us, and revealed that there was no consensus on the value of our work with them so far. Our trainers felt that the problem solving by teams had been relatively successful. Success was not perceived elsewhere, however. The faculty showed little skill in interpersonal processes, decisions were difficult to come by, and the manifest tension and disorganization among staff members were studiously ignored.

Our experience in this school clearly showed that a successful training event -- one that produces organizational change and an increased capacity for further changes -- need not be accompanied by good, warm feelings toward the training crew! (The reverse is also true: good feelings don't necessarily guarantee a successful, change-producing event.) When two members of our crew talked with the principal later in the school year, he reported that the staff had made good progress toward teaming, but he refused to grant us any credit for it; our people picked up clear messages of hostility from the principal, as they had all through our interaction with him. Also, we began to hear indications from several sources that many of the staff seriously disliked our work with them. When we queried the cadre's coordinator some time later, she reported that while a majority of the staff had moderately favorable feelings toward us, a minority was stridently opposed; and it was the voice of the latter group that was being heard.

Despite this animosity, the staff later requested and received a substantial amount of training from the cadre of OD specialists. Further, in our quantitative analyses, this school ranked fairly high among trained schools on our outcome measures (see chapters 6, 8, 10, and 11). This was especially true in later years.

School K23

This was the only junior high school trained by us; there was no compelling reason for choosing it over the other two junior highs, though the principal was a member of the short-lived steering committee for the overall project. In fall 1968 the school had a professional staff of approximately 40, some part-time aides, and some 780 students.

The two members of our crew who interviewed staff members in late October 1968 found that the staff reported problems of two kinds: within the building there was a lack of clear goals, of coordination between departments, of knowledge about what other faculty members were doing, and of understanding of the roles of building administrators and department heads; further, the staff felt a lack of communication and support from the central office, and their instructional schedule was determined primarily by the arrival and departure of school buses!

When one of our trainers met with the faculty to rank concerns and set goals, he was pleased that the work was helped by persons who had previously been in our training events. Several teachers expressed enthusiasm for the training, and some informal discussions continued after the scheduled ending time. At a meeting with the principal later in November, we devised a rather fragmented training schedule that was dictated by the need to work around fairly rigid time schedules. We would work with members of the various departments, with teachers who happened to have a common free period, and with the administrators and department heads. The total staff could be brought together only for a 50-minute period at the end of the day, but a Saturday was also set aside. Over the next four months we conducted five events of varied lengths for all or part of the faculty.

The first event was a set of two meetings with the school's informal "cabinet" -- composed of the principal, his assistant, the two counselors, and the half-dozen department heads. Our plans for the first meeting (on two successive mornings in late January) were to begin problem-solving on the issues identified in faculty interviews earlier and to examine interpersonal processes within the cabinet. Our observer reported that during this first meeting a great deal of time was spent in confronting (or avoiding) interpersonal conflicts among cabinet members while the group slowly warmed to the task of examining the problem-statements from the interviews. The main product of the meeting was an agreement to bring another member from each department to the next meeting in early February. Attempts to initiate problem solving again bogged down in interpersonal conflicts. One of our crew later reported:

> It seemed that the staff had so many things hurting that they couldn't set any priorities as to what hurt the most. As a consequence, they had difficulty in setting a particular topic to discuss.... Some have also not been willing to accept the fact that others have different feelings than they, and that those feelings are important. Several seemed to say, "I don't feel that way, what's wrong with you?"

The third event, in mid-February, brought together teachers with the same free period (that is, these were not intact work groups). We planned to give the same kind of skill training to each of the seven free-period groups: we would present examples of communication skills, conduct the "nonverbal cooperation" exercise, and debrief the activity. The groups seemed to move through the exercise, as expected, with little cohesiveness, lots of tension, very little interpersonal skill, and some help from staff members who had previously been trained by CASEA. The climax of the day was an inconclusive exercise on one-way and two-way communication. Still, our crew felt the day was partly successful in focusing apprehension so that departmental groups would be primed for the problem-solving activities we planned for the following day. We were somewhat cheered when a group of teachers quickly initiated a party to continue discussions of their processes. Our colorful observer summarized this happening as:

> a welcome surprise showing the interveners that they had once more met the forces of evil with the good of confrontation. Moving slowly toward the sunset, half stoned by the pace of the day's flurry, the interveners marched -- determined to find their way back to the motel.

On the next day we met with the departments separately to introduce communication skills and to initiate problem solving with statements of the present situation and of goals. Our trainers were generally pleased with the departments' progress toward specifying problems and goals, and noted evidence of cohesiveness and commitment to a common course of action within several departments. Departmental chairpersons reported the results of their work during a meeting of the entire faculty at the end of the day. The staff seemed bored and wrung out and plans to list restraining forces were abandoned, with the understanding that the individual departments would make these lists of restraints prior to the next intervention set for a week later.

The departments, each meeting with us for a 50-minute period, continued problem-solving work the following week, with varied results. At the end of the day, departments paired off to brainstorm action plans to overcome restraining forces and to share feedback on process. Our observers reported high involvement by staff members and good quality of action plans, although one department was too beset by interpersonal conflict to be systematic about solving problems. It met separately with one CASEA trainer, but could make no progress in resolving the conflicts.

The final event was a full-day session for the total staff in mid-March. During the morning, departments again teamed up to describe their plans for action while our crew encouraged the use of communication skills. In the afternoon, two departments made presentations to the entire staff on school-wide problems, and some decisions were made on solutions to both problems. Reactions expressed during the debriefing session that ended the day were generally favorable; interest in more work with CASEA was voiced, though there seemed to be some concern that plans would not be carried through.

In assessing the event, our crew felt we had improved problem-solving capacities at the departmental level and established some new norms for communication, but that we had fallen short of making major school-wide changes. Major problems had been clarified, some consensus on the department heads' role had been achieved, and many individuals had received useful feedback on their behavior. In contrast, we had not effected any change in the principal's leadership style. His lack of decisiveness and his constrained personal style were major blocks to change in the school. Role clarity continued to be a problem, and rigid authority relations still prevented initiatives by teachers. We learned later, however, that two staff members conducted some problem-solving sessions for the staff and that there was more than one instance of teachers initiating an action plan and presenting it to the administration, a novel procedure for that school.

School K31

The district's older high school, school K31 often struck us as a classic case of the difficulties of working with a large, rigid, secondary school. In fall 1968, it had a staff of nearly 100 and more than 1,460 students.

During our interviews in late October, teachers spoke of some problems of communication, coordination, and role conflict within the building, although they said that most of their problems existed chiefly between the school and the central office. Our crew distrusted the report that problems lay chiefly outside the organization, and our suspicions were later confirmed.

Here, again, problems of communication and coordination between us and the participants cropped up. There was the occasion, for example, when we arranged to feed back data from the interviews at a staff meeting. We thought we had a firm agreement with the principal that the meeting would be given over to that purpose. When the hour arrived, however, the principal conducted business as usual. After the meeting, when we challenged him on the point, he said, "Oh, I thought you were just visiting." Another meeting for feedback had to be scheduled. On more than one occasion, although the principal did allow us a part of a meeting, he used most of the time for regular business and left us too little time at the end to be effective.

The principal never evinced any hostility toward us, either in faculty meetings or in the privacy of his office. Neither did he offer any firm supportive word or action. His announcements of us to staff went something like, "The people from CASEA are visiting with us today. I'll turn the rest of the meeting over to them."

The interviews and brief questionnaires we administered, if taken at face value, gave a picture of a smooth-running organization in which everyone knew his job, procedures were clear, time was blocked out for everyone within which to perform his duties, and everyone knew where to turn in case of unforeseen events.

The person to whom most turned was almost always the principal. As we compared responses from persons in different sorts of jobs and listened to conversations in the coffee room, inconsistencies in the pictures staff members gave led us to further inquiries and a new picture of the situation. It became clear that teachers knew that they had very large freedom of choice within their own classroom and teaching, but next to no freedom in any matter that involved interdependence with other staff. The norm was extremely strong that any extra-classroom matter was in the hands of the principal and his aides. The business of the school was thoroughly organized, hour by hour, by duties allocated to time-slots, much in the same manner that specified operations are allocated to positions on an assembly line. So thorough was this allocation that it was not even possible for department heads to get together for a conference (during working hours) without getting special permission from the principal to use a particular period for such a meeting instead of using it for pre-allocated duties. In brief, the school was a comfortable, predictable, secure place to work as long as you accepted the "fences" within which to do your work that the principal had erected. This school exhibited a very low level of stress, conflict, or dissatisfaction because everyone understood that at any time a potential conflict began to surface, the principal would "fix" it. He would separate, in his beautifully articulated school structure, the persons, or the duties, or the time periods, so that no arena remained in which a conflict could be fought through. Almost everyone accepted the norm that problems of coordinating work with others were beyond their power to work out; the principal would take care of them.

Given this diagnosis, we decided not to try to work with the staff as a whole or even with a subsystem such as teachers in a department. Our best bet at the moment, we decided, was to see whether we could open even a small breach between two or more of the compartments, so to speak, of this strongly organized school, and allow some potential conflict or problem to become visible. In other words, we sought a method to raise the level of stress in at least some part of the school.

Why didn't we let well enough alone? This question will be better answered in Chapter 3 on theory. Suffice it to say here that we saw evidences that resources of individuals were being wasted and that potentiality for constructive change, for any cause, was very low. Part of our contract with the district called for trying to increase the potentiality for creative restructuring when necessary to meet the challenges of population growth, political pressures, and innovation in curriculum and management, and we felt this high school had very low potentiality.

Fortunately, we had one small point of "entry" into this school. Two of the department heads had attended earlier training sessions in their capacity of representatives of the KEA and had confidence in the possible benefits of our work. They agreed to find three other interested department heads to attend an exploratory meeting with us. They obtained permission from the principal to rearrange their duties so that they could meet with us for an hour and a half on a Tuesday at the end of November.

Our purpose at this first meeting was only to provide an occasion, not available within the ordinary operation of this school, for communication to occur. As Runkel put it at the meeting, "My purpose in asking you here is only to enable you to ask one another whether you might find some profit, as department heads in having time to talk together."

Over the next six months, two of us met with this small group and, at various times, with other department heads and the principal. The group floundered at early meetings and had difficulty identifying areas of common concern for problem solving. The idea of a council of department heads to promote communication, though, did seem to strike a small spark. In mid-February we scheduled a meeting of all department heads so that the original five could present their concerns to others, but when the principal passed out the agenda we were taken aback to find that it consisted only of routine business, with no mention of the topics we thought he had agreed to handle! At the end of the meeting, however, the principal agreed to set aside every other Tuesday for department heads to meet and asked us to be present at them.

At one of these meetings, the five did present their concerns; at the next we introduced some communication skills, and at a third, conflicts between departments were brought into the open. Sex education and conflict with the community were the focus of the next meeting, in mid-April, and some action resulted. The department heads consensually decided that they would communicate directly with the central office to seek clarification of the district's support for them in coping with the attack from right-wing groups seeking to eliminate sex education. The superintendent agreed to attend the group's next meeting to hear the group's concerns. By this time, our crew felt that we were seen as helpful by the department heads, and that they had increased their skills in interpersonal communication, could look at more than one way of solving problems, and that they could make some decisions.

The superintendent and one assistant did attend the department heads' next meeting, and we thought that the group generally showed a good deal of mutual support, minimal defensiveness, and good sharing of concerns and feedback. At the final meeting, we raised the possibility of additional consultation from the cadre -- to be formed the following month -- and there were suggestions as to ways the group could find time for collaborative work in the future. Some interest in both actions was expressed but no firm plans were made.

At the time, our crew felt unable to make confident predictions about the department heads' readiness to work further toward the directions we and they had opened up. To our surprise in the summer of 1969 we received news that the school's class schedule had been rearranged so that department heads could meet on any day of the week they chose during the coming year! Some initial discussions between the cadre and the department heads were held in the fall, but no serious work came of it. We felt some success in facilitating collaboration among the department heads, and were gratified by the conduct of the meeting between them and the top administrators, but we knew that our impact on the staff as a whole had been minimal. It is perhaps worth mentioning that in the fall of 1972 the school invited a small team from the cadre of organizational specialists to help with school-wide discussions of goals and philosophy.

School K32

The district's new high school opened with a great deal of fanfare in September 1968. The multimillion-dollar building had a huge resource center as its central feature, and was designed to accomodate team teaching, modular scheduling, and individual instruction. When the school opened, it had about 980 students and approximately 50 teachers.

The staff of this school had joined teachers from a new high school in a neighboring district for a 16-day workshop in August 1968, just before the school opened. The first few days of this workshop were spent in T-groups focusing on communication and team building, while the rest was spent in small-group sessions that focused on preparing for teaching in the new ways expected at the school. The T-groups were to continue as problem-solving groups throughout the year.

When we interviewed staff members in October, we found that the summer experience had uncovered an ideological split between the liberal humanities department and the more conservative staff members in other departments. We judged the effects of the sensitivity training, overall, to be detrimental. There was little or no communication between departments or between the T-groups, and the experience had left the staff ill-prepared to cope with the massive uncertainties, frustrations, and conflicts engendered by the principal's determination to operate the school in a flexible, non-rigid manner. From the interviews and from informal contacts with various staff members, we began to form a picture of fairly constant conflict and tension pervading the school. The results of our interviews were shared with the staff in a short meeting in mid-November, and T-groups set priorities on the problems reported. Finally, in early December, the principal proposed that we schedule five short sessions for training with parts of the staff, and one event for the total staff.

One of our crew acted as process consultant to the cabinet (the principal and the two assistant principals) at a regular meeting in early January, while the three administrators discussed their job descriptions and the strengths and weaknesses of the school. Our most prominent impressions of the meeting were the extreme differences in style between the quiet principal and one aggressive assistant.

Later that month we assisted at a meeting of the cabinet, the humanities department, and three central office administrators to work on the conflict that had been brewing between the department and the others since the school opened. While the central office coordinators felt they weren't getting sufficient information from the humanities teachers, the teachers felt the district administration was trying to force them away from their innovative approaches to instruction. During the meeting, obstacles to agreement arose when the coordinators subtly used the power of their positions to threaten the teachers and when several teachers baited and attacked coordinators and administrators. Emotions ran high, the imaging exercise we had planned turned into a free-flowing discussion, and no concrete actions plans were made.

We scheduled an event for the entire staff for mid-February, and made some designs for the day, but we were surprised to find on our arrival that the principal had presented the faculty with his own complete schedule for the session! It was to be an evaluation and planning session led by the principal, but we thought the session turned to worthless gripings with criticisms and hostility being aired in unhelpful ways. Our only significant participation was leading the short debriefing at the end of the session. We scheduled a meeting for the following week to evaluate the afternoon.

Unmitigated disaster! Langmeyer, the CASEA trainer, described his experience as "Daniel in the Lion's Den" and added:

> I knew that the session might be a touchy one because the [previous event] was such a bore and, worse, was somewhat insulting to the staff. What happened, though, was well beyond my imagination. I had no idea how frustrated the staff had become with themselves and how easily this frustration could get displaced to CASEA and more directly to me. It was indeed the low point of our work in [K32] during the 1968-69 school year.

Departmental groups met to debrief the previous session, and then department heads were to meet in a fishbowl (department heads in a small circle with listeners surrounding them) to design a more productive evaluation procedure for the following year. As soon as this group convened, frustrations boiled over and our man became the focus of a concerted attack. The resentment at the previous session's activities were displaced to him (although we had had no hand in designing that session), and his competence, sensitivity, and intentions were aggressively challenged. On the horns of a dilemma, we were accused both of being too task-oriented (in contrast to the faculty's experience in the sensitivity training) and not presenting a clear, definitive plan for fixing up the school!

Considerably shaken by the experience, our crew decided to concentrate its efforts on work with the cabinet (administrators and department heads). In March, we agreed to focus the remaining training on communication, leadership, and problem solving. We held a short session in Mid-April for the cabinet to teach communication and problem-solving skills while working on the role of the cabinet. Two additional sessions focused on the same skills and topic. As we left, plans for strengthening the role of the cabinet were under way. We later heard that the cabinet was working fairly well together and that the feeling of pervasive crisis in the school had subsided, and that additional training -- either from the cadre or from the staff that had provided sensitivity training -- was being contemplated. We concluded that our main effect on the staff was a strengthening of the cabinet.

In 1970, after we had ceased intervention in the district, we learned that the ideological conflict in the school had led, at last, to intervention by the district's central office. The principal was removed and replaced by one of the assistant principals, a man with a strong authoritarian bent. The school staff understood that is would henceforth operate in a much more traditional way. Our intervention certainly did not succeed in enabling the school to cope, in a progressive problem-solving way with their basic conflict.

In Summary

In general, few of the systemic changes we had planned to bring about in schools resulted from our training. We had planned to improve clarity and stability of decision making, to upgrade the management of conflict within the cabinet; and to establish freer channels of communication among all parts of the district. None of these objectives was uniformly established. We benefited immeasurably, however, because we improved our knowledge, theory, technologies, and skills. Perhaps the most useful function served by the training was successful demonstration of the strategy of laboratory training for organizational development, so that many staff members experienced the training and its potential benefits. We are convinced of the efficacy of our demonstration because several of the schools we trained later asked for additional training from the cadre of organizational specialists that we established in the summer of 1969. Further proof of our success is that many of the members of the cadre came from schools to which we had given training -- even from schools in which we had "failed."

At this point, the reader may wonder, given this somewhat discouraging record of training, why we are undertaking to write a book about our exploits and their outcomes. There are several reasons. First, the most exciting part of the story is yet to come. The establishment of the cadre of organizational specialists was an important experiment in itself, and a very successful one in many ways. We shall tell its story below. Second, our questionnaire data tell us that the training we and the cadre gave to schools did have some measurable effects; we shall present the data in several later chapters. Third, the lessons we learned in this project led to better designs in later projects. Especially, in a project that got under way in 1970, we incorporated revised sequences and amounts of training that produced much stronger effects than our efforts in Kent. The 1970 project was undertaken to test whether OD methods could help elementary schools convert to multiunit structure (team teaching and supportive structures); its conduct and outcomes are reported by Schmuck, Murray, Schwartz, Smith, and Runkel (1975). Taken together, this report and the one on the 1970 project offer a wealth of evidence on methods of facilitating organizational change in schools.

In late spring of 1969, our role in the life of the district shifted from one in which we provided training directly to important subsystems to one in which we began building a new subsystem (the cadre) that would continue the work of self renewal.

The most exciting and satisfying part of the project still lay ahead of us as, in the spring of 1969, we prepared to launch the cadre of organizational specialists that would continue to give consultation and training for organizational growth long after we left.

Launching the Cadre

(January 1969 to March 1970)

Our early plans for the Kent project included the hope of leaving behind a corps of skilled persons who could carry out the functions we thought necessary to a self-renewing capacity. Our early plans were to train various groups in skills such as problem solving, assessing progress toward goals, and other skills paralleling our original seven goals. Our intention was to provide the district with several groups, each a carrier of a capacity for one of the functions needed for self-renewal.

By mid-fall 1968 we had revised our plans to focus on trainng a single group of 20 to 25 district employees as facilitators of group processes. This fit well with the district administrators' original conception of the project as one to improve communication.* It also suited better what we thought we could accomplish at the time. We secured the administration's support for the plan, and tried to distribute information and application forms throughout the district. Once again, our intentions were frustrated by the district's clogged communication channels, and the forms were only minimally circulated. Another round of applications was sent out. Although we were disappointed by the relatively small number of applicants -- meaning that we could not select specialists as judiciously as we had hoped -- a final selection of 23 persons was made. The first specialists included five central office personnel and eighteen teachers, counselors, and administrators from eight of the district's 22 schools. We had the administration's support and commitment to provide the cadre with funds for a half-time coordinator, released time for cadre activities, and a small budget for supplies.

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* Indeed, the cadre decided to call themselves the Communication Consultants (CCs). Here, however, we shall continue to label them the cadre of organizational specialists (cadre for short) to conform to our other writings on the subject.

We met with the applicants in late May to describe the project goals and the cadre's role. A good deal of confusion and anxiety were evident during the evening, but we thought it had been a useful first step in acquainting them with us and each other. Each specialist was given a book of "homework" readings.

The first and major training event for the specialists was a two-week laboratory in June, 1969. The first week was devoted to exposing them to a variety of exercises and building the cadre as a cohesive group. Individual specialists were given experiance as co-trainers in exercises in communication skills, decision making, observation of group processes, and the like during the first part of the first week. Temporary teams of specialists designed exercises to focus on particular consultative skills and conducted them for their colleagues during the second half. During the second week, intervention teams formed and members of each team shared resources and expectations, while the cadre as a whole generated a list of potential clients for the first training events. Teams then selected a client, made entry, gathered diagnostic data, and returned to the training site to review their data and make plans for their first events. For details of this initial training, see Chapter 4.

During the next several months the intervention teams carried out a variety of training events with mixed results.

The most successful team worked with the staff of the district's second open-concept school (K12) that we have come to regard as the star of the project. Like school K11, the staff was in temporary quarters for the 1968-69 year. In fall 1969, the staff moved into its own building, a structure well-designed for collaborative teaching. The principal -- himself a cadre member -- communicated his enthusiasm for OD training to his staff. The specialists and the staff had clear mutual expectations about the goals of the training, and the training was well-designed to fit the needs of the newly-formed staff. The cadre team conducted a two-day training laboratory for the staff before school opened in August, 1969 to focus on communication skills, group processes, and organizational problem solving. Three half-day sessions of follow-up training were held during the fall.

A second team created a very successful two-course sequence in communication skills and group processes that has been repeated annually as an inservice course for individuals. This team originally planned to work on relationships between secondary principals and the assistant superintendent for secondary education; when the assistant superintendent resigned and was not replaced, the team was able to switch its focus smoothly. The courses have become the primary route to cadre membership;

a third course dealing with consultation skills, was later added to the sequence, and about half the cadre's present members became specialists via these courses.

A third team had a relatively unsuccessful experience with the staff of a junior high school. The intervention was initiated by the team when a cadre member reported that the faculty of the school were polarized by the issue of student conduct. The team gathered information and conducted three training sessions before the specialists were rather forcefully told to leave. From our records, it seems that the cadre team, the principal, and the staff were unclear about the nature of the problem, the goals of the intervention, and how to proceed with the training. The student conduct problem turned out to be a non-problem, but the team learned of this too late. The team planned its efforts to culminate with problem solving on the discipline issue, but when this topic was introduced, the staff was surprised to find that the specialists still thought it a problem!

Other interventions initiated during the June training seemed to sputter along for a while and then fizzle out. One team hoped to work with the cadre's Community Advisory Group in hopes of finding ways to improve communication between the district and the community. Another team opened discussions with department heads in the older high school, while a third team took as its target improving relations between principals and Student Personnel Services staff. All three teams made some progress, and a Community Advisory Group team did hold two short training sessions with the group, but by early 1970 no traces of these teams' work were to be found.

Our prominence faded over the months as we gave over initiative to the specialists and prepared to withdraw from active participation in the district's affairs. Each of the intervention teams was assisted by one of two members of our crew who took consultative and supportive positions within the teams, and leadership gradually passed to the specialists themselves.

In the interventions that were staffed jointly by the cadre and CASEA, it is difficult to say how much of the contribution to success or failure was made by the cadre and how much by CASEA. We are sure, in many instances, that we were helpful, and even at times pulled chestnuts out of the fire. On the other hand, we made mistakes too. In the case of the junior high school mentioned earlier, two of our crew shared in making the erroneous diagnosis and shared, too, in carrying on a design for intervention that must have had some of the feeling of the proverbial bull in the china shop. One thing is clear from data that will be presented in later chapters: the interventions in which the cadre shared, or which they conducted themselves, generally had more favorable results than the interventions we conducted alone. This fact gratifies us; teachers who are outshone by their students can indeed be proud of their teaching.

On the final day of the initial June training event we had set up a coordinator-and-steering committee structure to provide a mechanism for decision making and governance of the cadre, and over the next seven months the speicalists came to exert strong and expert control over their own directions. We were invited to participate in two further short training events the specialists designed to build their own skills and to increase their group's cohesion.

While the cadre's intervention teams provided a variety of services to other parts of the district, the coordinator and steering committee developed policies, procedures, and resources to maintain the new group. By November 1969 the specialists had adopted job descriptions for the coordinator, the steering committee, and specialists; they had devised procedures for joining the cadre and withdrawing from it; and they had established criteria for cadre membership. Finally, a norm of respect for diversity among the specialists was established early, so that each could participate in cadre activities as his or her talents, interests, and available time allowed.

A key role in helping the specialists function effectively was performed by the coordinator. He handled budget arrangements; stored training materials, records of the project, and a small library in his office; he served as convener of the steering committee; and he worked with local colleges to arrange credit for training courses.

The coordinator was the major link between the cadre and other parts of the district. Because the specialists came from all parts and levels of the district, and because they served the entire system, the coordinator reported directly to the superintendent. He discussed some interventions with the superintendent before they were launched. Requests for training went directly to the coordinator, who relayed the requests, worked with the potential clients to make up a team of trainers, and made sure that training assignments were equitably rotated among all specialists.

The cadre was launched with the public support of the superintendent, who urged officers of the KEA and administrators to assign the cadre a high priority for that year (1969-70). Newspaper articles and an announcement in the district's newsletter signalled the administration's support, and the district provided a budget of $8,000 for supplies and for released time for specialists.

As the time for our withdrawal from the district neared, we felt confidence in the abilities of the individual specialists and in the cadre's abilities as a team to maintain itself and provide training for organizational self-renewal to the district. Of course, like most new things in schools, the cadre had begun with the buoyant enthusiasm that usually marks a new attempt to change schools. Our confidence was tempered by the knowledge that several of the persons we trained had become inactive shortly after the school year started. We were worried, too, by the heavy workloads being assumed by the active specialists, and by the difficulties that we knew any new subsystem has in maintaining itself over time. By the end of the year, 17 of the 23 original specialists still gave the project high priority, but they did this only at the cost of spending considerably more time than they had anticipated.

The worst crisis, though, had been gathering since December 1969. It threatened not only the specialists, but the entire district. A virtual paralysis settled over the district as its members struggled with the hard realities of a budget deficit that totalled nearly two million dollars.

Interlude 3: Crisis

The booming Seattle-area economy began to sputter in mid-1968. By mid-1970 it had nearly come to a halt, for a variety of reasons connected with local and national conditions. Since World War II the

Seattle-area economy has rested on a single foundation -- the Boeing airplane manufacturing company -- and Seattle had been called the world's largest company town. At its peak, the company employed about 100,000 persons in the area, and local economists estimated that each Boeing job created and supported one other job in the area. Economic graphs of growth in the region show a spectacular rise between 1964 and 1967 as Boeing met with success after success in landing contracts for commercial and military airplanes and for aerospace hardware.

But 1968 was a terrible year for the aerospace industry. The national space agency cut back its orders. The 747 airliner did not sell as well as expected. Boeing's lines of credit were overextended, and so the economic collapse began. Economists who at first warned of a mild recession began talking of an outright depression. From more than 100,000 employees (including 7,000 in Kent alone), Boeing's rolls dropped to fewer than 30,000. The Seattle-area economy simply stopped dead; unemployment rose to as high as 15 percent. Assessed valuations and tax revenues to local school districts fell off drastically. At the worst of the regional depression, Seattle's "sister city" in Japan sent a massive load of food for distribution to the unemployed, and a billboard appeared at the south end of the city: "Will the last person to leave Seattle please turn out the lights?"

The depression could not have come at a worse time for Kent. In November 1969, an auditor in the state education department informed the district that he had discovered a shortage of nearly a million dollars in the district's operating budget. The error was traced to the district's business officer and to slippages in accounting procedures among the many county and state agencies involved in monitoring the school district's budget. The business manager stated that he had evidently copied a wrong figure from one report to another! The district administration, under orders from the state education office, immediately mandated cuts totalling a half-million dollars in the district's budget. The business manager was "assigned to special projects" and a high school principal temporarily took over the business office.

As a later audit revealed the deficit to be closer to $1,85 million -- out of an operating budget of approximately $12 million -- the intensified crisis shook the district. Programs were cut, spending was curtailed, jobs were eliminated, salaries were cut, and in-service training was sharply reduced. The administration planned to cut the certificated staff by nearly 100 positions, even though an increase in enrollment was anticipated.

Tempers flared and disputes engulfed the district. A group of citizens unsuccessfully attempted to sue individual school board members, and later began a movement for a recall election. School psychologists and counselors brought suit against the district to prevent the reduction of their salaries. Top administrators in some cases left the district rather than return to classroom jobs. Voters decisively voted down a special tax to cover the deficit; the measure was defeated by nearly three to one.

The spring was a tense one for us as negotiations between the education association (KEA) and the administration threatened to eliminate all support for the cadre. However, because the specialists were seen by many as valuable to the district, some support was assured. The superintendent later told us, in writing, that training by us and the cadre had been major assets in helping the district come through the budget crisis.

To our delight, the cadre weathered the crisis; not only has it survived to this day as a distinct subsystem, but it has continued to provide valuable service to the district. It has given training and consultation to a large proportion of important groups in the district, it has renewed its leadership and membership successfully, and the specialists began using intervention techniques that we did not teach them! We shall say more about the cadre's fortunes in the section on "Maintenance and Self-Renewal" below and we shall give more detail on its various activities in Chapter 11, and 12. The next section gives an overview of the activities of the cadre.

Activities of the Cadre

(March 1970 to June 1974)

From the time of our withdrawal from Kent in early 1970 until the close of the 1973-74 school year, the specialists' influence has been felt in nearly all parts of the Kent district and in many places outside the district. Despite forces in the cadre and in the district of the sort that often spell the demise of an innovative effort, the cadre has maintained and renewed itself. In this section, we describe the highlights of the cadre's later history; more detailed descriptions of the specialists' activities are provided in ~~Appendix~~ Appendices 4-A, 5-A, 5-C, and Chapters 11 and 12. We shall mention here work with school staffs, administrative and other groups in the district, groups that link the district with its community, and groups outside the district, as well as the specialists' efforts to maintain and renew their own group.

Over the past five years the specialists have passed through periods of both extensive activity and virtual stagnation. The period from its creation through the fall of 1970 was the cadre's busiest time in terms of sheer activity. The low point was undoubtedly the fall of 1971, when the cadre was nearly inactive and the entire district coped with adjusting to a new superintendent. At other times the cadre has been moderately to very busy with training for school staffs, administrative departments, and other groups, as well as with the communications courses and efforts to improve its own procedures and functioning.

Work with Schools

The cadre has given OD training or consultation to ten of the district's 15 elementary schools, one junior high, and one senior high school. Cadre training helped launch three new schools, while other interventions helped established staffs refurbish interpersonal and problem-solving processes, meet organizational crises, and examine survey-data feedback.

By spring 1970, the specialists (with our heartfelt agreement) had made the wise decision to intervene only by invitation; they would no longer designate a target and attempt to convince the group that it needed OD. The coordinator did, however, actively circulate information about the cadre's services through formal and informal channels. Several principals asked about possible workshops with the cadre in the summer of 1970.

Even as these events were taking shape, an organizational crisis demanded immediate attention. One principal discovered in May 1970 that more than a dozen teachers planned to resign or transfer because they were dissatisfied with his leadership. One specialist interviewed several teachers, met three times with the principal and a group of teachers to discuss ways of improving communication, and reported to the principal feedback she thought he needed to hear. The situation was greatly improved. All but two teachers withdrew their resignations, and the staff requested more formal training in August of 1970.

Seven elementary schools were trained in August 1970 in events that ranged from a day to a full week in length. All the training designs included exercises in communication skills and organizational problem solving, while other elements of the designs reflected the particular goals of each school. Training teams for each school had been selected by the clients, and intervention goals were jointly set by a group of the faculty and the cadre team. Below, we shall sketch very briefly the nature of the work of the cadre in schools. More detail will be given in Chapter 12.

In two open-concept schools about to open for the first time (K14 and K15), exercises often focused on expectations about goals, norms, and roles in the new collaborative teaching arrangements. At the other schools -- in their first to third years of operation -- the training focused on refurbishing communication and problem-solving skills, on refurbishing trust and group processes, and on specific organizational problems.

With the exception of the crisis-torn school (K02), all the staffs had received some previous training from CASEA or the cadre. In one school (K11) in particular, the specialists were much more successful than we had been in maintaining a smooth relationship with the staff. Staff members who were interviewed some time after the cadre's event told us that CASEA's training felt like an unwanted imposition, whereas the cadre's help was actively wanted and goals for the event were jointly established.

Specialists were asked to return to three of the schools later that fall, and members of the intervention teams observed faculty meetings and reported on the state of group processes, or gave additional training in problem solving.

We have records of four cadre interventions in elementary schools since 1970. A team of specialists conducted a two-day training laboratory for the successful open concept school (K12) to refurbish group processes in January of 1972. This outstanding school has received more hours of training on more occasions than any other school in the district, and it consistently appears at or near the top on almost all our outcome measures (see chapters 6, 8, 10, and 11). In a recent interview, staff members gave a number of reasons for their success, but they cited the training as the foremost. The specialists were again called in to assist in a crisis caused by a change in principals in school K07 in late August of 1972. The cadre has recently expanded its repertoire of intervention strategies for schools, and during the 1973-74 year specialists conducted two survey-data feedback interventions for two previously-untrained elementary schools (K01 and K04). Remarkably, in these schools the specialists have gone beyond the intervention strategies and techniques they learned from us, learning new things from the literature and other practitioners, and applying them appropriately!

The cadre's work with secondary schools has been much less extensive. In May 1970, two members of the junior high school we had trained (K23) asked a specialist to help them improve faculty meetings, and they designed a short intervention which the specialist then led. They later reported that the event had been successful, that communication skills were evidenced in faculty meetings, and that a group of teachers had recently developed a plan of action for some school problem and had carried an initiative to the administration to carry it out! Knowing the difficulties of doing something like that in the school as we do, we regard the act as some evidence that the training helped the staff tap its own personal pool of fresh ideas and resources, to treat dissatisfactions in a problem-solving manner, and to turn hopes into concrete actions. A small team of specialists worked with the administrators of the older high school (K31) in the fall of 1972 to help establish the school's goals, philosophy, and objectives.

Work with Administrative Groups

Many administrative groups -- including established departments and temporary meetings of administrators from different departments -- have called on the cadre's help; specialists have also given consultation to the leadership of the KEA and to groups of teachers engaged in special tasks for the district.

As the budget crisis broke over the district in early 1970, the superintendent and his staff (the cabinet) agreed that communication at their meetings was poor. Participants were unsure of their roles, and norms did not permit healthy debate and disagreement. Few decisions were made publicly, and the cabinet was the object of confusion and mistrust throughout the district. The superintendent decided to open the meetings to broader participation, and several job groups were invited to send representatives to them; the superintendent instructed principals that any teacher who wished to attend a meeting should be released to do so. The cadre of organizational specialists was asked to send two observers to each meeting. The observers gave the cabinet feedback over the course of several meetings, and as a result some important changes in group processes were made. The superintendent periodically stepped out of the role of presenter and convener to participate more freely in the discussion, while other cabinet members assumed leadership roles as appropriate. Agreements to help the meetings run more smoothly were made consensually. Time was allowed at the end of each meeting to debrief group processes and hear the specialists report their observations. As a result, there was much less criticism of the meetings by cabinet members, and the mistrust of the cabinet noticeably lessened throughout the district.

The superintendent requested a week's training for himself and his staff. That training, in July 1970, focused on skills of communication and decision making, team building, and systematic problem solving. The superintendent continued to call on the cadre for observation and debriefing of school board meetings with the cabinet, and of a budget hearing for the entire staff of the district. In December of 1970, the specialists and the cabinet met to discuss ways the cadre could help bolster the district's sagging morale; in this case we do not know what specific actions resulted.

Over the years, in addition, specialists have acted as process consultants or trainers for: members of the Curriculum Development division in June 1970, the annual summer planning retreat for the district's top administrators in 1972 and 1973, a task force of teachers who were revising the social studies curriculum in the 1972-73 year, and workshops related to the district's annual budget elections.

The specialists overcame the mistrust of the KEA toward them early in 1971 when they conducted an intervention for the group's leadership. While the association had supported the CASEA project and participated in training laboratories, many members viewed the cadre as an extension of the administration. Two specialists began observing meetings of the fifty-member representative council and debriefing them with the association's leaders. Cadre members then conducted helpful and confrontative problem-solving sessions that helped the building representatives and association leadership lessen their mistrust of each other, and the specialists continued to work with the association for several months.

District-Wide Communications

Lack of district support caused the cadre to cancel a major school community workshop, and the group slipped into inactivity when they discovered the new superintendent to be rather cool (although courteous) toward them in the fall of 1971. The superintendent we had known resigned at the end of the 1970-71 year for reasons of personal health and the budget crisis, but stayed on for a year as a deputy superintendent while the new man took over. The specialists felt that the new executive was waiting for them to prove their worth before he would support them. The test came in December 1971 when -- on short notice -- he asked them to design and conduct the first of the "Superintendent's Communication Seminars" -- meetings open to all district employees and designed to smooth the flow of information between top administrators and building personnel. The specialists quickly marshalled their resources, successfully carried off the event, and received a warm "thank you" from the superintendent in the next morning's district bulletin.

On even shorter notice (in fact, overnight!) the superintendent asked the cadre to conduct a meeting for school employees and community members the following evening to share information on goals and the impending budget election. A crew met over a 6:30 a.m. breakfast to design the event, and smoothly carried it off that night, in a remarkable display of ability to marshall resources, make plans, and turn them into action!

The seminars, attended by 40 to 100 employees, continued more or less monthly throughout the rest of that school year and the next. Topics of the seminars included school-community communication and one-to-one communication with colleagues and students; the issue of trust within the district, too, recurs often in reports of the seminars.

Early in 1974 the superintendent asked the specialists to survey district employees on the use of various existing communication channels and possible alternatives. The results were shared with a wide spectrum of job groups.

In-Service Training for Individuals

One of the most successful of the specialists' efforts on a continuing basis has been the three-course sequence of in-service courses in communications and group process skills. Begun by one of the teams established during the initial training of the cadre in June of 1969, the courses have been offered nearly every year since then. They serve to generate interest in the cadre's activities, they give individuals useful skills for working with colleagues and students, and they have become the main route to cadre membership for interested district employees.

The three courses typically form a sequence leading from basic communication skills to the competencies of OD consultation. The first course generally focuses on basic communication skills and exercises that highlight particular group processes. The second phase expands to include principles of feedback, a more thorough coverage of particular group processes, and application of interpersonal skills to the classroom. The third course is designed to teach skills in OD and consultation, and is usually conducted by a skilled trainer from an institution outside the district.

Linking School and Community

Many formal and informal groups have influence on the affairs of a school district, and specialists have worked with a variety of them to improve communication and working relationships between the district and its public.

Cadre specialists helped a local PTA leader conduct a problem-solving exercise to increase cooperation between elementary school principals and PTA officers; two specialists helped a group of parents establish a drop-in center for students with drug-related problems; specialists conducted a role-playing exercise to explore ways of improving school-community relations at a regional PTA conference; and specialists have given a number of demonstrations of communication skills and other OD activities to a variety of professional and public groups in the region.

Perhaps the most exciting of these events have been the multi-ethnic camps for students initiated by one of the specialists. First held in September 1969 for some 40 students, the weekend camp has brought together young people of different ethnic groups from many parts of the Seattle area to interact in exercises in interpersonal and intergroup relations, with a special focus on racial prejudice and conflict. The camps have been held several times since 1969.

Activities Outside the District

The specialists have become well known throughout the region and are often called upon by groups unrelated to the district. One school in the Auburn district and one in Federal Way received training workshops from the Kent cadre similar to the workshops in Kent described earlier. Cadre members have given training or demonstrations for a group of principals studying open-concept elementary schools, a group of prospective teachers as part of the Model Cities Program, leaders of the state League of Women Voters, parents in a community child care program, and others.

The Cadre as a Linking Organization

We feel that interest in organizational development for schools is growing, and one of our dreams envisions a network of local cadres that can call upon each other as needed to provide training for self-renewal in a variety of educational organizations. The Kent cadre has participated in a variety of activities with us and others to bring the dream closer to reality.

A regional conference for cadres and leaders of districts considering cadres was hosted by the specialists in November 1972. Representatives from the cadre we established in the school district in Eugene, Oregon, and from the district in Vancouver, Washington joined with the Kent cadre, some of our crew, and representatives from other school districts, universities, and the Washington state education department. For two days the group shared information about their own activities, spoke of their plans for the future, and shared ideas and concerns.

Some Kent specialists have joined with others to provide training for interested groups. One specialist helped launch the cadre in Vancouver along with two trainers from a state college; two specialists joined with some of our crew and members of the Eugene cadre for a two-day workshop for a high school (F31) in October 1971; and one specialist helped us demonstrate OD for members of the Berkeley (California) Unified School District in May of 1973.

Assessing the Cadre's Activities

That the cadre has continued to survive and function for nearly five years -- well beyond the usual lifetime of innovative groups -- seems to us perhaps the strongest single sign that our efforts have paid off in the Kent school district. Quantitative data reported elsewhere in this book provide some evidence that trained schools are more likely to exhibit the kinds of characteristics we identify as adaptability than do untrained schools. Communications received from the specialists and others provide testimonials to the benefits perceived by teachers in trained schools. Further, the specialists have shown a remarkable ability to maintain and renew their group despite forces of the sort that have crushed innovative efforts elsewhere: the budget crisis, the change of superintendents, uncertainties over budgets and top administrative support for the cadre, several changes in the cadre's leadership and relation to the district's power structure, and an approximately 50 percent turnover among cadre members.

Maintenance and Self-Renewal

A significant proportion of the cadre's energies have been devoted to maintaining the cadre as a group, to increasing their skills, and to renewing the cadre.

The coordinator-and-steering-committee structure for decision making has remained basically intact despite adaptive changes and changes in the specialists' leadership and membership. The original coordinator, selected by us and the administration, was the district's coordinator of language arts. He occupied a position of high visibility and enjoyed the respect of colleagues and teachers, a definite asset during the cadre's first year. When he left the district for the state education office in the summer of 1970, a high school journalism teacher was appointed. She in turn, asked to be relieved in September 1971, and a high school counselor backed into the job. On a questionnaire survey of willingness to take on various tasks, he was the only one who agreed to volunteer for the coordinator's position! The fourth (and present) coordinator is another high school counselor. The present coordinator, who was a member of our crew when the project began, took a job in the district in 1970 and was immediately admitted to the cadre. He was elected coordinator by a secret ballot of the specialists in fall 1973 and has considerably revitalized the cadre.

The steering committee's functions and membership have evolved over the years. At first the committee was composed of representatives from each intervention team. When the team structure loosened during 1969-70, steering committee membership similarly became rather haphazard and voluntary until mid-1971. At that time, the specialists began randomly choosing steering committee members for short terms from among those who indicated an interest in committee membership. This practice was abandoned early in 1972 after some sessions of systematic problem solving. Shortly thereafter, the specialists created a four-person "Decision-Making Task Force" whose members are now elected periodically. Its efforts are augmented by other task forces that gather data and make recommendations about areas of concern. The task force frequently polls all specialists on major questions, while periodic meetings of all cadre members provide an additional forum for decisions.

The cadre has shown a remarkable ability to maintain its membership despite the loss of many of the original specialists. As new employees join the district and as teachers and others complete the sequence of courses, they become eligible for membership, and the cadre's numbers have remained fairly steady, between 20 and 30, over the years. Problems such as membership criteria, recruiting, and determining levels of participation have arisen periodically, and a permanent task force now is assigned to deal with these questions.

The specialists have scheduled a variety of "self-renewal" sessions to learn new skills and intervention procedures, to attend to their own group processes, and to deal with specific problems. They have held six major self-renewal events for themselves, and several shorter sessions devoted to skill training. We assisted in two such sessions during the 1969-70 year, while others have been conducted by Don Murray of the state education association, Maury Petit of a state college, and John Hoff from a local consulting firm; two members of our crew conducted one of these events to open the 1972-73 year. Meanwhile, the cadre has maintained a number of links with outside agencies and persons and has established a task force to search out new strategies and methods of operation. The new coordinator is continuing the maintenance of a small professional library and is making an effort to bring relevant research to the specialists' attention.

With a few exceptions, the relationship between the cadre and the district's leadership has generally been moderately strong, though it has always been a matter of uncertainty and worry. While the specialists' job descriptions for themselves and the coordinator became part of the district's administrative manual by 1970, the school board has never officially adopted a policy encouraging the work of the specialists. The cadre attempted to have a policy like this adopted during the 1969-70 school year, but were told it was unnecessary since the cadre was "already covered" by existing policies. Originally the coordinator reported directly to the superintendent, and cadre members felt the support of the superintendent during their first years. When the district got a new superintendent, the old one became a deputy; among his other responsibilities was supervision of the cadre, so one layer of authority had been inserted between the coordinator and the superintendent. The specialists then became a part of the Student Personnel Services Division, and the coordinator reported to the division's director. While the new superintendent expressed some support for the specialists, he never helped them strengthen their work, and the search for legitimacy within the district continues.

In the early years, the cadre received a budget for its own operations (although not counting released time for school, among other things) of between six and eight thousand dollars per year. After the advent of the new superintendent, the budget began dropping; in the school year 1974-75, the cadre was given no budget at all.

It might seem that removing any budgetary support for the cadre would sound its death knell. But it did not do so! As the 1974-75 school year opened, the coordinator told us that morale in the cadre has never been higher. One indication of this occurred in the spring of 1974 when the annual election was held for the cadre's six-member Decision-Making Task Force. There was a tie vote for the sixth member. The coordinator asked the two if one wished to drop out, fully expecting that one would be glad to be relieved of the added burden. On the contrary, both were eager to serve. Furthermore, the cadre's services are still in demand. School K01 requested training for team building and problem solving to be conducted in August of 1974. Even though there was no budget for the cadre itself, the director of K01's area of the district found money to finance two days of training. The coordinator of the cadre reported that the event was highly invigorating. The cadre was requested to follow up with two training events at K01 in the late fall.

The district administrator who was last in charge (so to speak) of the cadre was still providing some secretarial service for the cadre and also space for the cadre's library, training aids, and other materials. Even without budget, the cadre was still considering the Kent district to be its chief "customer," although it had begun to be more open to invitations from other places. One evidence of its looking outward was its intention to change its name.

Naturally, the loss of budget raised again the question of membership qualifications. One of the cadre's first concerns in the fall of 1974-75 was to pare its membership to those persons willing to be fully active. The coordinator estimated that the number would settle down at about fifteen. A self-renewal session was scheduled for October. At the same time, the cadre was considering levying a membership fee to cover minor administrative expenses. In addition to these indicators of continued strength was the fact that the coordinator continued at his post, at the request of the rest of the cadre, even after he had resigned from the Kent district and had taken a position in the neighboring district of Auburn.

We see, in brief, that the cadre weathered still another crisis -- a crisis as severe as an organization can face. Despite the obvious discouragement of losing all financial support from its home district, the cadre continued to make plans for the future, continued to do active work such as that at K01, and continued to maintain its cohesiveness, interior organization, and attention to self-renewal.

In Summary

The Kent project for us was an experience in which we learned a great deal, suffered profound disappointments, and experienced exhilarating satisfaction when things went right. As the first large-scale test of our theories and technologies, it was an impressively valuable undertaking for us, and we think we can allow ourselves a measure of satisfaction regarding the benefits the district has received from us and the cadre.

Research and Data-Collection

(August 1967 to April 1972)

One of the most exciting parts of the Kent project that we envisioned in 1967 was that of conducting a large-scale, long-range research project that would generate a quantity and quality of data superior to that usually obtained in projects studying changes in schools. In all, we collected data from four waves of questionnaires that were administered to 1,250 professional staff members in the three districts between 1967 and 1972.

The mission of CASEA was stated in 1967 as the creation of organizational and administrative arrangements for education that could accomodate rapidly to changing instructional goals, techniques, and strategies. Our program's emphasis was on using group strategies for helping schools organize more effectively for change, adaptation, and innovation, and on identifying the crucial organizational characteristics of schools during change. The theory we had to guide us in 1967 was primitive, though serviceable. It was best represented by the literature on group dynamics, particularly the adaptations of group dynamics that had been made by OD practitioners in industry, by the pedagogy of experiential learning, and by the seven goals for training listed in the section of this chapter on entry. Since then, we have added concepts and propositions from general systems theory, from McClelland's theory of interpersonal motivation, and from recent writings on organizational theory. Our more recent theory, to be described in Chapter 3, will be used in this book to organize the presentation of data. In the remainder of this chapter, we describe merely the events that comprised the data-collection phase of the project.

We gathered three sorts of data. The major research instrument was a series of questionnaires. Also, we often conducted extensive interviews, mainly to gather diagnostic data prior to designing training events. Third, we have a large collection of documents that apprise us of the activities of the specialists and conditions in the district, including newspaper clippings, minutes of cadre meetings, reports of cadre activities, and letters from several members of the cadre.

We obtained agreement to our data-collection efforts as part of our contract with the Kent district, and early in 1968 the top administration in the bordering Auburn and Federal Way districts agreed to allow us to give questionnaires to their staffs. Even so, we were to encounter a variety of difficulties at all steps in the data collection, from misplaced questionnaires to bomb threats!

We initially tried to make a distinction between the training and research aspects of our project. CASEA was to be the training arm, while the research would be under the auspices of the Northwest Regional Educational Laboratory (NWREL) in Portland, Oregon. NWREL's name was on the questionnaire with ours and questionnaires were returned to their address. The lab's representative joined us to make arrangements for data collection.

Questionnaires were administered in January of 1968 by a number of local PTA officers we had trained. The process went fairly smoothly in elementary schools, but in Kent secondary schools we hit a snag that was all too characteristic of the district's operations.

The district's administrators apparently forgot to inform the principals of secondary schools about the data collection, and we did not discover the error until the morning of the scheduled day. After some scrambling by us and grumbling by the principals, things were rescheduled and the forms completed. Most teachers had not expected the questionnaires, and their comments on the forms at times vividly expressed their displeasure.

Shortly afterward, an officer of the KEA reported a number of complaints about the forms, especially about our request that the respondent and colleagues be identified by name (because we were attempting to identify cohesive sub-groups within the school) even though we made it clear that it wasn't necessary for respondents to sign their names if they did not choose to do so. Respondents also objected to items on family background of the sort common in sociological research. We believe that the comments reflected more than the usual resentment toward university-based researchers. The pervasive concern with confidentiality and disclosure mirrored the extensive mistrust within the district and what the KEA's newsletter termed "institutional paranoia." Further, the inadequate preparation brought comments on the worth of our research and our efforts. A few comments about the district itself told us either how good it was or how bad it was. While some teachers welcomed us ("We need help," and "How about some time in our building?"), others resented us ("Go Away!" and "Drop Dead!"), and one told us, "Your gummed label tastes terrible!"

Staff members in schools completed the questionnaires while our PTA representative waited, and central office administrators filled them out during two meetings at the district's headquarters. With more than 80 questions -- some of them with several parts -- the questionnaire took some people as long as two hours to complete. In Kent, we obtained returns from 384 of the 457 staff members (84%), in Auburn 204 of 276 (74%), and in Federal Way 284 of 368 (77%). The returns included all schools in Kent, all secondary schools in Auburn and Federal Way, seven of Auburn's nine elementary schools, and nine of Federal Way's thirteen elementary schools. Our overall return rate was 79 percent.

A new set of problems was encountered the next year, in May of 1969, when we entrusted the data-collection to a private research firm. Our plan was to assemble the staff of each school and to distribute the questionnaires to them at that time, but allow them to complete the forms at their leisure and return them to NWREL by mail. Using the private research firm was a mistake. In at least one school the person hired to distribute questionnaires took the occasion to disparage our research and present her own views on sex education. One teacher in the school wrote:

> she antagonized the faculty by giving her views on sex education in the _______ School District, which her children attend. It has been speculated that she was passing the survey in order to satisfy some means of her own -- getting into the various schools.

One can only despair at the quality of data that must have resulted from an introduction like that! Still, as we shall see in later chapters, the data as a body show consistent patterns of outcome that give us a good deal of confidence in their validity.

While the 1969 form was considerably shorter than the previous years -- it had approximately 50 items -- filling it out was still an onerous task for many people who expressed their resentment in their comments. The general run of negative comments was not nearly as vitrolic as those in 1968, and a much larger number of respondents volunteered information about the school district. Again, people expressed concern about confidentiality and told us they were not prepared for the questionnaire, and did not know its purpose. Reactions in schools we had trained were mixed, though negative comments slightly outweigh the positive. Several people saw little value in the training in return for the time spent, while others reported disappointment that the training had not been more extensive, and only a scattered few had praise for our efforts.

Our data collection in 1969 again covered all schools in Kent and secondary schools in the other two districts; we also obtained returns from all elementary schools in Auburn and eight of Federal Way's seventeen elementary schools. Our problems were undoubtedly compounded by our failure to feed back any of the 1968 questionnaire information that we had promised to the districts. We received a number of reports from Federal Way about their unhappiness. That we suddenly asked the districts to permit us to administer the questionnaires (in mid-May, always a hectic time in schools) after a year's silence undoubtedly lowered our rate of return. Many teachers simply discarded the form rather than take time to fill it out, and our overall rate of return was only 57 percent. We received questionnaires from 385 persons out of 649 (59%) in Kent, from 238 of 352 in Auburn (68%), and from only 163 of 380 in Federal Way (43%). We very nearly missed Federal Way altogether; when we organized 1969's questionnaires in our files after NWREL had forwarded them to us, we were appalled to discover that we had only four from Federal Way! We were completely unable to discover a cause for this. Finally, months later, the mystery was solved by the sheer good luck that someone on NWREL's staff stumbled across a dusty box in a back room. NWREL was moving its offices, and our questionnaires had been lost in the shuffle!

We achieved higher rates of response in the two final years of collecting data. We think there were three reasons. First, we gave better notice beforehand. Second, we did send to district offices, in January of 1970, some partial tabulations of data we had so far collected. Third, participants had not experienced any hurtful consequences from filling out our questionnaires; we think they were learning that we would, indeed, maintain the confidentiality of their responses.

The report to districts of January 1970 included comparisons among junior high schools of the kinds of innovations they had reported. It also compared norms relating to personal communication, helping others, and sharing ideas. The data included reports from the junior high school in Beaverton in which we conducted a project in 1967-68. The report also provided comparisons among schools in each of the districts on items about the extent to which goals were shared, opinions about school policies, and attraction to the job and the school.

We administered questionnaires again in April of 1970; this time our crew and some of the Kent cadre distributed the forms to staff members and waited on the spot while the forms were filled out. The administration proceeded fairly smoothly, and with one exception our records do not indicate any major difficulties encountered.

We again covered all schools in Kent, secondary schools in the other districts, eight of Auburn's ten elementary schools, and eight of Federal Way's seventeen elementary schools. We received returns from 533 of 717 staff members in Kent (75%), from 212 of 330 in Auburn (65%), and from 188 of 337 in Federal Way (56%), for an overall rate of 67 percent.

The next year -- spring of 1971 -- we tested feelings in the districts by telephone, and concluded that we would be trying their patience too far by asking for another round of questionnaires that spring. The decision was painful to us as researchers, but it seemed the prudent thing to do. We did, that spring, send three graduate assistants to interview some of the cadre and some members of schools where the cadre had done training. The results were not very useful.

The following year, in February of 1972, we sent to all schools in the three districts a series of five short interim reports. These reports described the work of the cadre of organizational specialists in Kent. They also gave comparisons of trained and untrained schools' norms of interpersonal communication, the teachers' attraction to their school and profession, and a measure of ability to use staff members' resources. After doing this, we felt a little more justified in asking for another round of questionnaire-answering that April.

Our scanty feedback of information to the districts was one of the major weaknesses of the project. There were many reasons for our failure in this respect, including underestimating the sheer bulk of work in processing so many questionnaires, troubles with programming the computer, and other matters too complicated to describe here. Nevertheless, we did a poor job of feedback, and we are not proud of it.

By April of 1972, as one of our crew put it, "We had them pretty well trained," and the questionnaire administration proceeded well. Once again, however, the district's administration complicated matters when the deputy superintendent neglected to secure released time for the Kent specialists who were to assist our crew. We hastily rounded up volunteers, drafted some members of the Eugene cadre, and managed to complete the administration. Two of our crew reported difficulties, and one of our assistants had a hair-curling experience. About half-way through the questionnaire administration, the principal walked out of the room to talk with two somber-looking visitors. When he returned, he calmly announced, "When you've completed your questionnaires, would you please look for the bomb in your rooms." Our assistant was rather flustered, but the teachers seemed unconcerned, and the principal later explained that phony bomb threats had become a routine occurrence at the school.

The 1972 questionnaire was approximately one-half the length of previous ones, and was not nearly as time-consuming for respondents. Our rate of return was better than in previous years. We obtained returns from all Kent schools, secondary schools in the other two districts, eight of Auburn's ten elementary schools, and sixteen of Federal Way's seventeen elementary schools. We obtained questionnaires from 496 out of 701 people in Kent (71%), from 264 of 337 in Auburn (78%), and from 504 of 644 in Federal Way (75%). We plan no further collection of data from the districts.

Conclusion

In the remainder of this book we describe our theory and technology, various sorts of findings, methodological problems, and recommendations. Although the Kent project is now officially behind us, we still carry our learnings with us, the cadre continues to be active in the district and elsewhere, and our knowledge continues to find application in other schools and districts.

Chapter 3

THEORY AND TECHNOLOGY I: LEVELS OF ORGANIZATIONAL FUNCTIONING

Runkel and Wyant

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Chapter 3

THEORY AND TECHNOLOGY I: LEVELS OF ORGANIZATIONAL FUNCTIONING

Runkel and Wyant

(Final)

Schools and districts function because of interaction occurring on three different levels: on the individual level, the work-group level, and the level of the organization as a whole. On the first level, individuals deal with one another. On the second level, collections of people put similar expectations upon one another, and certain persons gather repeatedly to carry out certain functions. On the third level, the organization as a whole maintains routines that facilitate certain ways of doing all these things and discourage other ways. A theory to guide organizational change in schools must contain statements about how behavior can be altered at all these levels. We will discuss each level, in order, in this chapter. Because we are telling, in this book, the story of an intervention by outsiders (CASEA) into a school district, we have written this chapter from the point of view of the intervener. Some of our theory will deal with the relationship between intervener and client.

The theoretical scheme we present here has developed from several sources: from reading about other theories and talking with colleagues, from trying out intuitions and reflecting upon how they worked out, from studying patterns of data that we have collected on our projects and that have been reported by others, and by repeatedly trying to write down how all these ideas fit together.*

When we began the Kent project, our theory did not have the form that we shall set forth in this chapter. The theory took form partly as a result of our experience in Kent. We did not try to write this book from the theoretical point of view we had in 1968 and 1969;* we believe the present theoretical scheme enables us to make better sense out of the history of the Kent project and the data we collected during it. The next theoretical scheme we write will surely differ somewhat from this one.

Social scientists may criticize us for explaining results with theoretical propositions that we developed after the data were in. But we believe our choice is a sound one. Most of the elements of the scheme we put forth here were present when we began the project, though they were not as well organized as we believe them now to be. Also, we did not begin to look at the bulk of the detailed data until 1972. We were working out our theory during the intervening years while the data reposed, unanalyzed, in our files. Finally, we believe it would be almost unethical to ask our readers to go to the work of following a way of thinking that we consider to be weaker than the one we can now offer them.

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*The bibliography lists relevant theoretical pieces and reports of our own and others' research findings.

*Chapter 2 of Schmuck and Runkel (1970) represents well our thinking at that time.

First Level:

Individual and Interpersonal Dynamics

The first level of organizational life takes place face to face. This is the level of one-to-one communication among group members sometimes called interpersonal dynamics. We shall begin this section by talking about the chief kinds of satisfaction that we believe account for the greater part of human interpersonal behavior.

Most people have the opportunity to choose between various opposing kinds of interpersonal behavior. They may choose between: activities requiring higher expenditure of energy or those requiring lower expenditures; strong achievements or weak ones; helpfulness or obstructionism; activities that express love or those that express hate; mastery of their own fate or acquiescence to the will of others.

People seek these qualities of behavior during their working hours just as they do during other hours. People at work in schools do not very often look for motivation in the sense of being aroused from lethergy; when they are enervated, they are at home sick. What people working in schools or other organizations do often look for, however, is a satisfying direction of action.

As we go along, we shall pick out certain statements about the behavior of people in school organizations as basic theoretical propositions and label them as "postulates." These will be statements we now think logically underlie our theoretical thinking.

Postulate 1 is this: people have available more paths to further satisfactions (are happier, if you will), when they engage in the "positive" sides of these behavioral choices -- that is, when their behavior is active, successful in tasks, affectionate, and influential.

Not everyone is skilful at capitalizing on opportunities for activity, achievement, affiliation, or power, nor is every working group. We believe that by learning new modes of interpersonal behavior, people can become more skillful in these ways.

As Postulate 2, we are asserting that every person, when learning as a member of a continuing group, can learn to be more skillful in marshalling energy, achieving success in tasks, reciprocating affection and exerting influence.

Postulate 2 implies that productive group members are not merely born that way; they can be made. It does not say that personality characteristics have no effects on the performance of an organizational member, but it says that interveners in organizations are not limited by the kind of personalities they can find to stock the membership. No matter what personalities members have, all of them can learn new modes of interpersonal behavior in periods of time that are economically feasible.

In general, we believe that organizational norms that allow greater exercise of energy, personal achievement, enjoyment of others' personal qualities, and influence upon management will make organizations happier places to work.

As Postulate 3, we assert that interpersonal norms and ways of organizing work that maximize these satisfactions will yield productivity that is not impeded by obstacles like in-fighting, back-tracking, the need for complex control mechanisms and many supervisory personnel, high personnel turn-over and even outright sabotage. There are some hints in our projects, including the Kent project, that this statement may be backed up by data, but until more data are available, we shall simply postulate the statement as something we are taking for granted at the outset.

Conceptions of Satisfactions

So far in our discussion of interpersonal relations, we have spoken of the dimensions of activity, achievement, affiliation, and power. We have chosen to give constant and primary attention to these four ways of interacting because of the extensive and solid support they have received in behavioral research by many others. Further, we have found these concepts useful guides in designing training episodes. We usually use McClelland's (1958) labels for the last three modes; he began studying these "motives," as he preferred to call them, many years ago. But many other investigators have put forward similar conceptions that seem to support one another as well as McClelland's.

In 1961, Foa reviewed a number of earlier studies by others and discovered that two interpersonal dimensions repeatedly appeared; he called them dominance-submission (McClelland's power) and love-hostility (McClelland's affiliation). Longabaugh (1966) also reviewed an array of earlier studies and discovered the same two dimensions that Foa had found.

Alderfer (1969) had a somewhat different perspective. His research persuaded him to postulate three chief dimensions underlying relationships: (1) existence needs, (2) relatedness needs, and (3) growth needs. Since Alderfer's existence needs include those for sustenance and a place in a society's economy, his first dimension deals with relationships that spur activity and corresponds to McClelland's "activity." The aspect of establishing relatedness or stabilized connections with other humans seems to contain some of McClelland's "affiliation" in it and also some of his "achievement." Alderfer's third dimension, that of personal growth, seems to us to contain some aspects of achievement and some of power in the sense of control over one's fate.

Earlier than 1955, Osgood and Suci, in studying dimensions of meanings in words, turned up strong tendencies for people to interpret many things, including ways they can interact with others, as having varying degrees of three aspects: (1) active-passive, (2) strong-weak, and (3) good-bad. The first corresponds to the "activity" we have mentioned in connection with McGregor and Alderfer.

The second seems to correspond to power or achievement or some combination of them. The third, having a strong basic connection to approach or avoidance, seems to indicate a readiness to affiliate with people or reject them.

A few years ago, David Berlew brought us his conception of charisma; it has been very useful. Aside from having technical competence in their fields of endeavor, influential leaders are also able,says Berlew, to establish three kinds of relations between themselves and their followers. First, the charismatic leader is able to express clearly important group values. In this way the leader promotes Alderfer's "relatedness" or McClelland's "affiliation." Second, the charismatic leader can imbue followers with feelings of competence -- that it is within their ability to attain what they are yearning for. This confidence seems to us close to McClelland's power, with perhaps a strong component of achievement. Third, the charismatic leader can infect the followers with a feeling of urgency: do it now! This kind of interpersonal arousal is the same, we think, as promoting the satisfaction gained from activity. In short, the charismatic leader is able to promote and strengthen the four kinds of satisfaction in followers.

Summing up, these four kinds of satisfaction seem useful guides in designing organizational processes. The designer can use them as a check-list: "Will this organizational practice enable members to be more active? to pride themselves on their accomplishments? to feel connected with their team? to experience control of their own destiny?" The translations to design are rather straightforward.

Alderfer's scheme is useful to us especially because it contains some postulates about directions of striving for satisfaction after frustration. Figure 3-1 below is adapted from Alderfer's article. The arrows signify the movements Alderfer postulated and

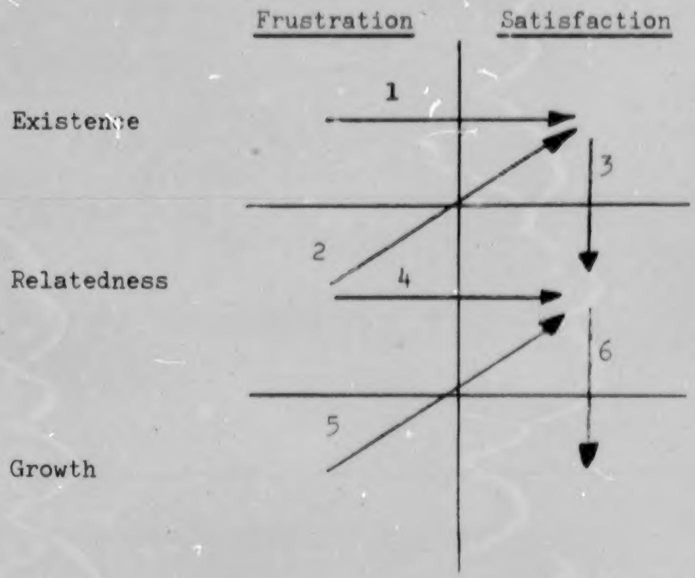

Figure 3-1.

Alderfer's predictions

tested. For example, the arrow labelled "1" signifies that if people are frustrated in trying to achieve their needs to maintain existence, they will continue to strive to satisfy them adequately; people will not turn, for example, to trying to satisfy relatedness needs.

Arrows 2 and 4 postulate that people who are frustrated in relatedness needs will strive either for the satisfaction of existence needs or those of relatedness with others, and so on. Arrow 3 signifies that when people have satisfied existence needs, they will then strive to satisfy relatedness needs. The fact that no arrow leads out of the area of satisfied growth needs indicates that Alderfer predicts that people whose growth needs are being satisfied will not strive to satisfy other needs until external circumstances threaten them with frustration of those needs. Furthermore, arrow 5 points from the frustration of growth needs to striving for satisfaction of relatedness needs; only after achieving satisfaction of relatedness needs, says Alderfer, will people who have been frustrated in their growth needs renew their striving for satisfaction of the growth needs. This set of predictions was borne out in good measure by Alderfer's data. We hope others will test the scheme in their organizational research. Perhaps we ourselves shall have an opportunity to do so before long.

Degrees of Skill in Schools

Working organizations screen their employees. Since it happens that success in a career or in getting along with others often rests on one's skill in finding satisfactions, individuals with very low degrees of skill in finding satisfactions do not get in. Some people are hindered in achieving success in tasks by uncorrected or uncorrectibly deficient eyesight. Some people grow into habits that flagrantly reject warmth and affection. Some seek such absolute and pure control over their own activities that they reject any influence from others or interdependence with them. People with these debilities are less likely than people without them to become employees of schools.

Of course, schools differ; some are freer from debilities in their staffs than others. It is important for the intervener to make an assessment of the distribution of exhibited and potential interpersonal skill in the school. (Assessments of this sort will be displayed in later chapters. Other variables of this kind may be found in appendix 3-A.) A common mistake experts make is that of forgetting that methods of intervention suitable for clients with one level of skill will be less suitable for clients at another level.

The three suburban districts studied here, Kent, Auburn and Federal Way, contained staffs having relatively high degrees of interpersonal skill. Many urban districts contain much lower levels. This is not to say, of course, that the three districts showed a degree of interpersonal skill that we consider requisite for a constructively adaptive organization. As a matter of fact, as we recounted in Chapter 2, members of the Kent district originally approached us because they felt that their methods and norms for communication were inadequate. Nevertheless, interpersonal skill in Kent was high enough for them to perceive the usefulness of outside consultants, negotiate with them, and make the decision to let them in. Not every district has this much ability.

Money Yields Energy

It is too easy for consultants to forget the importance of working on a base of adequately available energy. As *Postulate 4* we assert that the satisfaction of existence needs (to use Alderfer's term) can often distract people from seeking satisfaction of the "higher" needs for activity, achievement, affiliation and power.

If interveners have legitimation through approval from the district's administration, they can expect that the district will make opportunities for energy-expenditure available (that is, make time available) through authorizing them to spend paid time with the intervener. This authorization makes available to the staff the satisfaction of existence needs (in Alderfer's term) and gives interveners the gift of an occasion during which they can offer the staff satisfactions of a higher order. Even when interveners propose to work with school staff outside normal working hours, the prevailing professional norms help staff to accept the occasion as associated with the "bargain" they have made with their employer. This is more true, of course, when they are given supplemental pay than when they are not.

Once people in school or district accept their work with the intervener as a legitimate expenditure of their energy, the intervener then has the opportunity to engage them in activities that will bring them the satisfactions of activity, achievement, power, and affiliation. The intervener does this, step by step, through the technology of organizational development of one sort or another.

As Postulate 5 we are asserting that as the participants in a change project begin to experience an increased frequency of higher-order satisfactions, they are likely to find greater energy at their disposal. This happens in two ways. First, new trust in others' helpfulness and in effective collaboration with others may enable work to get done in less time and with less stress, releasing energy for new activities. Second, after experiencing the rewards of greater achievement, increased mastery, and warmer relations with others in the activities engineered by the intervener, participants may decide to borrow time and energy from other parts of their life. Thus participants may relinquish or postpone parts of their ordinary work or their usual after-work pursuits.

There is a danger, of course, in asking participants to borrow energy from themselves. The loan (or most of it) must eventually be repaid. Change in organizations often requires great outlays of energy. The intervener who depends on loans of energy that participants make from other parts of their lives is operating on a shaky basis.

But however the energy is found, satisfactions of the sort we have been discussing are the psychological basis for moving people.

Although we have discussed, in this section, ways an intervener can give people greater satisfactions at the first level of organizational functioning, we do not want to leave the impression that the first step in organizational development is changing individuals. As practitioners of organizational development, we do not design training for individuals, but rather, for groups. As interveners, we teach work groups to improve their modes of interpersonal behavior, and we feel that an entire group of workers must be trained together for training to improve organizational effectiveness and health. This point will be clarified in our discussion of subsystems.

Second Level:

Subsystems

We have seen that the first level of organizational life is the level of individual and interpersonal dynamics. The second level is that of group functioning. It is the level in which people come together to carry out certain tasks.

When individuals strive for the sorts of satisfactions derived from achievement, activity, affiliation and power, they often find themselves moving into working relationships. To achieve success in many kinds of tasks, people often find it necessary to join with others and to coordinate their work in a cooperative manner.

As Postulate 6 we assert that many essential organizational tasks require strong cooperative interdependence. This may seem so obvious as to be hardly worth mentioning, but it is basic.

When a group within a system is performing work that is reasonably distinguishable from the work of other groups in that system, and when the work requires considerably more frequent and detailed communication among members of the group than with persons not in the group -- in short, when there is more interdependence among members of the group than between them and persons outside the group -- we say that the group is a subsystem.

A team of teachers is a subsystem of a school, and so is a self-contained classroom. A school is a subsystem of a district.

The business department is a subsystem of the district's central office. A formal department is not always a subsystem however. If teachers in an English department work more in interdisciplinary teams of teachers than with one another or their department head, if money is allocated to interdisciplinary programs of instruction rather than to disciplines, then the English department is less a subsystem than is the team or the program. Relative interdependence among members is the key to the concept of subsystem. Clearly, under this definition, students in a school are a subsystem different from that of the staff.

Because one cannot see structure in the same way one can see individual action, subsystems are not always readily visible. In a traditional school, a teacher and his or her students in one classroom display very well, during the time the class is in that room, the characteristics of a subsystem. A well-integrated team of teachers shows the characteristics of a subsystem. A superintendent and his "cabinet" of advisers often does. But to what subsystem, with reasonably clear boundaries, does a mathematics supervisor belong? Or a bus driver? Or a peripatetic school nurse? Some of these people may, in fact, have very weak membership in any subsystem; they may participate in subsystem functioning only sporadically and tangentially.

Of course, no individual functions as a member of only one subsystem. It is helpful to think of a subsystem in an organization as an interaction of a cluster of humans for the purpose of carrying out some function. A teacher works in a team of teachers to organize learning opportunities for students. The teacher works with a different cluster of persons when carrying a requisition for materials to a secretary who forwards it to a procurement officer. The teacher contributes to the function of organizational decision making when giving advice on school problems at a staff meeting. In brief, the teacher moves from one subsystem to another to contribute energy and information required by the various functions a school organization must carry out.

Sometimes the intervener's design for organizational development will include working with existing subsystems. At other times, when certain functions are being neglected that could, if performed properly, improve the effectiveness of education or the satisfactions gained by the school's members, the intervener or the client may decide to construct a new subsystem within school or district. Constructing a new subsystem requires re-allocating time-energy-money budgets to support a re-allocation of functions. It also requires building the opportunities for satisfactions into the new structure that will give it the cohesiveness of a well-functioning subsystem. Finally it requires instituting "interfaces" with the other subsystems with which it will be interdependent; that is, the necessary new links to carry coordination and information must be set in motion and regularized. This book tells in some detail the story of building one such new subsystem -- the cadre of organizational specialists in Kent (Chapters 2, 4, and 12).

Norms and Roles

We find very helpful two concepts dear to sociologists: norm and role. People are aware of norms as "the way we do things around here." They are aware of roles when they say "It seems to me you are the right person for me to come to about this." Roles are visible because of norms that specify the pairings or clusters of people that carry out the same kinds of functions. Clearly, subsystems always manifest a variety of interrelated roles.*

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*The view of roles in this section follows that of Newcomb, Turner, and Converse (1965, Chapter 11).

When a person comes in contact with others while carrying out a task, it inevitably becomes necessary to work out some sort of coordination. The janitor may need to ask a couple of conversing people to move aside so that the hallway can be swept, and people view this request as permissable. If the janitor wants to sweep a classroom during class hours, the teacher (perhaps even some students) may feel thwarted in their present tasks, and may demand that the janitor come back another time. Sweeping the classroom floor during class hours becomes "not the way we do things around here." A norm grows up that specifies the times that certain parts of the building should be swept and by whom. The norm specifies actions that are required (such as getting the whole school swept daily), actions that are permitted (such as asking people to step aside when an area is being swept at an approved time) and actions that are prohibited (such as sweeping a classroom during class hours). The strength of a norm depends on the degree that there is agreement in a group about the behavior that is required, permitted, and prohibited. It also depends on the degree that group members exhibit to other group members approval of actions that fit the requirements of the norm and disapproval of actions prohibited by the norm.

The importance of norms to organizational adaptability lies in their strength and persistence. Norms may be very strong and pervasive even when the behaviors they refer to are vague and ambiguous, such as when teachers speak of "acting professionally." Norms define organizational climates. They may be powerful forces for resisting organizational change. On the other hand, the creation of norms that support interpersonal openness, and tolerance can move the school a long way toward constructive adaptability.

Roles are specified by norms about the reciprocal, interdependent behavior appropriate between two persons or among the members of a work group. Certain kinds of business are considered appropriate between two teachers in a teaching team. Between a teacher and the principal, however, other kinds of business are deemed appropriate.

Just as it takes two to tango, it takes at least two to maintain a role. The true definition of a role is negotiated by interaction and may, in fact, be very different from the kind of role definition one finds in administrative manuals. That is, roles take their shape from the daily expectations people have of each other and the way these expectations are fulfilled.

When an organization undertakes to change its goals or structure, when it changes allocation of function or duty, it necessarily alters norms for interaction between pairs and within groups. When it comes to changing roles, most administrators (and too many consultants) expect school staff to work out the necessary new interpersonal relationships without any help during the transition. And they often fail. In the organizational work described in this book, we took pains to teach school staff ways of communicating that would enable them to be explicit about changes in norms and roles. We taught them to make explicit group agreements about the norms and roles they would sanction, and we gave them time to practice the new reciprocations. We shall present evidence in many later chapters about the extent to which some of these new norms and roles held up after our departure.

Incompatible expectations from different "role senders" can create stress for the individual. For example, some parents expect teachers to discipline their children while others do not. Stress also arises when the requirements of a role and the needs and values of the person in the role are incompatible, as when a teacher does not believe in punishing children but the school rules prescribe that he or she must do it. Finally, conflict results from incompatibility between two or more roles held by the same person, as when a counselor must gain a child's confidence but is also required to report the child's infraction of a rule to local authorities.

However, multiple role-taking can also serve to coordinate related activities, as when a teacher engages in both curriculum development and classroom instruction. Integration of related activities can also be achieved through the use of special linking roles. An organizational specialist inside the district who acts as group facilitator for the district is an excellent example of such a link. One of his or her major tasks is to foster collaboration between subsystems.

Explicit norms and roles are the fundamental building blocks of an adaptable organization. (Of course, being explicit about this matter itself requires a norm.)

As Postulate 7 we assert that making old and new norms explicit during a transition period will maximize an organization's chances of success in selecting old norms for discard and new norms for adoption. In other words, it is necessary to be explicit about norms and roles if organizational members are deliberately to take action to replace old norms with new. Important skills required of the intervener are the skill of (1) ascertaining the norms now operating in the school or district, (2) making them visible to members (since organizational members are often unaware of many of their norms), (3) helping members to generate ideas for new norms that will give support to the change being undertaken, and (4) helping them to anticipate the problems they will encounter in trying to establish the new norms.

Differentiation and Integration*

A subsystem must be highly integrated within itself if it is to perform its function effectively. It must have strong cohesiveness; members must be responsive to the task requirements and personal needs of others.(Joe is sick today. Will you pitch in?) At the same time the subsystem, if its function is at all complex, must have differentiation among roles. (Joe, we all know you are especially knowledgeable about ecology. Will you set up a demonstration for twelve students on Wednesday?)

A subsystem must also be integrated with other subsystems on the third or organizational level to the extent they depend on one another to carry out their own functions. And it must be differentiated from other subsystems in ways that enable each to perform its function without duplication or without undue conflict. In fact, there cannot be effective integration without differentiation nor differentiation without integration.

Traditional features of teachers' and principals' roles often act as barriers to differentiation and integration. Many teachers, for example, do the major part of their own planning, operating, and evaluating. This inhibits differentiation because labor is not divided, and it blocks integration by reducing interdependence. The lack of interdependence, in turn, leads the principal to work with teachers singly, and this practice prevents interdependence from developing or even being perceived as an alternative. Thus a self-maintaining circular effect occurs.

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*This discussion follows Lorsch and Lawrence (1970). Although Lorsch and Lawrence wrote about industrial organizations, their concepts seem readily adaptable to schools and districts. We have paraphrased this section from Schmuck, Runkel, Saturen, Martell and Derr (1972, pp. 7-8).

Urges toward integration can be very strong. When a group comes to feel closely knit and highly competent, the satisfactions of affiliation (interpersonal affection and allegiance) become very strong. Many veterans of elite war-time groups such as the Commandoes or the Green Berets long for the "good old days" -- not because they especially liked killing people, but because the camaraderie in the group was so joyous. The "T-groups" in school K-32 were this kind of highly cohesive group. The danger of a highly cohesive group is that it comes to be seen by others as elite and as competing with them for resources. The elite group, in turn, comes to see their special demands on resources as "only right."

Conversely, strong competition between groups often produces strong cohesiveness within the groups, as Sherif and his colleagues (1961) showed so well many years ago. Using competition to produce in-group cohesiveness is indeed effective but there is a danger that the norm of competition will be followed to harmful lengths.

As Postulate 8 we assert that every organization must continually seek productive balance between two directions of organizing, differentiation versus integration. When the two forces are in balance, they support each other, and the organization thrives.

When one outruns the other, the organization sickens.

There are four ways in which subsystems within an organization may differ. These four aspects of differentiation include structural formality, goal orientation, time orientation, and interpersonal orientation.

Structural formality. Effectively organized subsystems must have particular structures that fit their own particular environmental demands. A subsystem such as a community relations department, that must be responsive to a highly uncertain subenvironment, should have a loose formal structure, while a subsystem processing highly certain information, such as the department that arranges bus schedules, is probably most effective when it has clear, standardized procedures and controls.

Compared to some other human organizations (the military, for example), a school contains a relatively small number of positions: numerous functions are discharged within one position, and each function is shared by a comparatively large number of people. In the military, policing is done by the MPs, teaching by the training officer, and requisitioning by the first sergeant. In schools, every teacher does some of all the relevant functions. Since the same persons appear in many of the functional subsystems of the school, the subsystems tend to be undifferentiated structurally.

Goal orientation. In many organizations, subsystems exhibit clearly different subgoals. In schools, however, this kind of differentiation is difficult to discover. For one thing, the overall goals of the school are often vague, and subsystems cannot, therefore, know clearly when they have accomplished their subgoals. For another thing, the subsystems themselves are often not distinct and therefore cannot easily be identified as the loci of particular subgoals. This is not to say, however, that conflicting goals do not sometimes appear between and within subsystems. Probably the most frequent clash of subgoals appears between the teacher or administrator who is for the moment acting in the custodial or policing role and the counselor who is acting in the nurturant role. Other conflicts occur between the curriculum consultant and the classroom teacher and between the budget officer and the building principals. In these circumstances the organizational consultant can help staff members to become aware of the subsystems within which they are acting and of the subgoals appropriate to these subsystems. Increased specificity about subgoals -- even when overall goals remain vague -- can increase effective coordination among subsystems. Of course, being more specific about subgoals leads to better co-ordination only if subsystems are working on goals that are beneficial to the whole organization.

Time orientation. Subsystems also differ in time orientation. Bus schedules are daily and seasonal. Lesson planning goes by the period and the unit. Curricula are geared to the unit, the course, and the school level. The environment outside the school contains differing pressures and perspectives. The educational philosopher at the university may speak about decades and generations. Congress may appropriate money for a two-year revision of physics curricula. The local community may demand immediate discharge of a coach whose athletic team has had a losing season. In the midst of these pressures and conflicts, an organizational consultant can bring subsystems together to discuss the time frames within which they organize or work. This communication can produce wider understanding of the mutual influence of short-term and long-term actions and lead to better coordination among people working with different time perspectives.

Interpersonal orientation. The fourth aspect of differentiation among subsystems is that of interpersonal orientation. Counselors, for example, pay considerable attention to the quality of their emotional relations with students while giving them information about occupations; school purchasing agents, on the other hand, are more concerned to receive the kind of floor wax they ordered than they are about the feeling the supplier might have toward them. In general, interpersonal feelings have much more effect on the conduct of work than most people believe, and one ever-present job of the organizational consultant is to heighten group skill in ascertaining the effects of personal feelings.

Third Level:
Organizations

The third level of organizational functioning is the level of the organization as a whole. It is the level on which subsystems communicate and function together. A healthy and effectively functioning organization must have subsystems which not only function smoothly internally, but also are co-ordinated with each other and work together toward the organization's goals.

An example of a school having problems with third-level interaction is K-32 in which there were conflicts and poor communication between departments and between each department and the central office. The third level will be discussed in more detail later in this chapter and in Chapter 11.

Technology and Pedagogy

We have now set forth enough postulates, definitions, and assertions about typical conditions in schools and districts so that we can say a few more important things about how one might set about changing organizational practice. The intervener can offer opportunities for satisfactions not previously available in the organization. The intervener can also teach new techniques that maximize the wider array of satisfactions during the pursuit of organizational tasks and that make the achievement of organizational goals more sure.

Widening the Satisfactions.

In general, our view is similar to that of McGregor (1960, 1967). Watson (1966, p. 484) has summarized McGregor's contrast between the pervasive older view of human behavior in organizations (theory X) and the newer view that moves toward what we are calling "humanistic" (theory Y). The table below is Watson's.

Theory X		Theory Y	
Assumptions about people	Administrative policies	Assumptions about people	Administrative policies
1. Naturally inert, avoid work	1. Drive, "motivate," coerce	1. Naturally active, enterprising	1. Lead
2. Dependent	2. Direct	2. Independent	2. Use self-direction
3. Set in ways	3. Routine procedures	3. Growing	3. Open to change
4. Irresponsible	4. Check up	4. Responsible	4. Trust
5. Resistant	5. Fight, on guard	5. [Are willing to be] "with you"	5. Cooperation
6. Unimaginative	6. Prescribe	6. Creative	6. Encourage
7. Short-sighted	7. Plan for them	7. Capable of broad vision, long view	7. Plan with them

In the customary, traditional view, workers are seen as residing passively, even contentedly, in a condition of low activity and initiative. Consequently, they must be pressed and threatened into activity. The new view is that people will act with initiative if they are not impeded by a restricted conception of what is possible or by threats of punishment for taking initiative.

The traditional view is that workers have some skill in obedience, but little in the exercise of power, and that only exceptional individuals strive for power. Consequently, most people must be given detailed supervision, and their work must be highly routinized. The new view is that all persons strive for mastery; if they are blocked from constructive influence, they will control their fate by fighting back in relatively safe ways -- by sticking to the letter rather than the spirit of regulations (especially when doing so will thwart the bosses), by slow-downs and obstructionism, and by outright sabotage. The intervener with the new view will offer workers constructive ways to exert influence.

The traditional view claims that workers take no satisfaction from sheer achievement -- that they can respond only to rewards at the level of existence such as money. Consequently, work need not be organized to enable the worker to exploit his or her full talents -- tightening four bolts or processing children within the self-contained classroom is enough. The new view claims that every one takes satisfaction from accomplishing meaningful tasks -- that is, from bringing to completion, through one's best efforts, a task that produces something worthwhile. A curriculum handed down from above usually draws only superficial commitment from teachers, but a curriculum worked out freely by the teachers themselves can draw strong commitment and effective application. A student may conform minimally when required to memorize a page from a play, but is likely to memorize the entire play with joy when he or she volunteers to perform in a play actually staged. Consequently, the intervener with the new view offers opportunity for meaningful achievement.

The traditional view treats workers as isolated units and looks upon any group-formation as "ganging up" on management. The traditional principal works with each teacher individually and eschews group problem solving. The new view seeks to capitalize on the strengths of interpersonal allegiances and group problem solving.

We ascribe to the newer more "humanistic" view of people's behavior in organizations. We believe that all people want to develop the skills that will lead to the satisfactions of activity, achievement, affiliation and power. But opportunities for practicing new styles of behavior must be given if people are to develop their skills. Many organizations deprive members of these opportunities by punishing them when they engage in interpersonal behavior that might help them gain satisfactions such as those of achievement or power. For example, one of us recently remarked to a person at the checkout counter at a supermarket that certain items selling for 49 cents each were also advertised at two for 99 cents. When asked whether the manager might like to be aware of the anomaly, the checker said she had already told the manager about it, and his reply was, "Listen, when you have your own store, you can run it the way you want to!" Or, organizations sometimes offer opportunities for meaningful achievements or power but then take them away. In one junior high school we know, the principal appointed a teacher to be chairperson of a committee and told her he wanted her and the committee to formulate the problem, plan a solution, and carry out the work. Three days later, he called the teacher to his office and told her, "Here is how I've decided that work had better be carried out...."

As practitioners of organizational development, we help organizations institute new norms based on the new view of people's behavior. We thus try to create new, more humanistic organizations. It does not necessarily follow that productivity under the new norms will be higher than under the old. The chief reason for this is that the new humanistic organization may not value the traditional definition of productivity and may not strive for that sort of output. It may turn to a new kind of productivity that partially replaces the old.

It also does not necessarily follow that under the new norms, workers will move toward the same goals that management has set for the organization in the past. When people are allowed the opportunity for more achievements and power in an organization, they may direct the organization's energies in totally new ways. As practitioners of organizational development, we are doing much more than simply offering means to mobilize workers to commit themselves more enthusiastically to management's goals.

Changing the Norms

The traditional school is held together by norms that hold people to the old way of doing things and that limit them to the old satisfactions -- avoiding punishment, maintaining the good will of the principal, demonstrating conformity to rules, not making trouble, defending oneself by keeping aloof from others, and joining the professional organization for whatever it can offer in feelings of heightened power, achievement, or camaraderie. A school that wishes to augment the satisfactions of its staff (not to speak of students and parents) cannot merely proclaim a new regime. New norms (group agreements) must be built; they cannot be brought into being merely by exhortation.

Nor is it easy for an administrator to change interpersonal norms merely by his own commitment and example. A trusting, strong, skillful leader (as described by Schmuck, 1972) can do a great deal to improve the kinds of satisfaction available to staff. Nevertheless, norms are agreements between people, and it is very difficult for one of the partners in the agreement to alter norms when he or she must bear the whole burden of teaching new conceptions, new techniques, new legitimations, new roles, new occasion-making, and all the rest. One principal who tried altering norms by himself, even though he spent full time for a year doing so, has written about the difficulty of moving imagination and initiative in these matters from himself to his staff (Flynn, 1971, 1974).

In our own work (including the work reported in this book) we have always instituted change by training the partners in interaction. More exactly, we have trained subsystems, not individuals.*

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*Sometimes we have failed to locate strong subsystems. See, for example, Murray (1973), M. A. Smith (1972), and Starling (1973); these dissertations are summarized by Schmuck, Murray, Smith, Schwartz and Runkel (1975). In the present project, one presumed subsystem that turned out to be minimally so was the Student Personnel Department; see "Second event: Key staff personnel" in Chapter 2.

We shall next describe some skills and norms that we sought to introduce during the training episodes in this project. The emphases varied, of course, depending on the goals of each particular training event and depending, too, on how well each event was designed and managed. As an important example of design and management problems, see the case of the junior high school described in the section "Launching the Cadre" in Chapter 2.

First-Level Skills and Norms

Individuals are unlikely to participate in new kinds of interaction with one another (guide themselves by new norms) unless they believe that the margin of probable benefit over probable cost will be greater under the new norms than under the old. When trying to adopt a new norm, people must estimate the likelihood that their organizational life will be bettered. People must also estimate the costs of reaching the new organizational mode. Usually, people find it difficult to believe that the rewards of increased initiative, personal achievement, increased influence, and mutually-supportive collaboration can actually be brought into being. They are usually doubtful, also, that more collaborative modes of action can "get the work done" as well as the traditional authoritarian mode -- even though the intervener proposes collaboration only for the more highly interdependent tasks. They also have other doubts -- whether the principal or superintendent will really support the change effort, whether they or their colleagues have the necessary skill or can acquire it, whether they will be required to borrow time from other work or from their own unpaid time, and so on. For all these reasons, people understandably face organizational change with trepidation. Even though they may yearn deeply for satisfactions they cannot now reach, their estimates of the risks make them reluctant to take any but very small steps.

Contrary to some authors, we do not believe that humans have a built-in resistance to change. Rather, we take the position that change is sometimes actually welcomed although it is risky for all of us. People will change their accustomed behavior when they estimate that the benefits to be gained, combined with the probability of achieving them, outweigh present satisfactions and the probable costs of making the change.

Using the above reasoning about the usual forces working against sudden and large changes, we design our training so that it asks only small risks of participants and gives them quick experience of new satisfactions. The first skills we try to impart are listed below.*

Let Postulate 9 be postulation of these skills as primary, since we have not yet directly shown their primacy in data.

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*This list is a re-phrasing of the list given on page 342 of the Handbook (Schmuck, Runkel, Saturen, Martell and Derr, 1972). For findings within the Kent project concerning these skills, see Chapter 5 of the present book.

1. Skills of communication that yield quick and accurate feedback in face-to-face situations concerning meaning, readiness to move in one direction or another, common reality, and commitment to proposed courses of action -- even during periods of anxiety or emotion. For details of these skills, see section 3.4 of the Handbook (Schmuck, Runkel, Saturen, Marteil, and Derr, 1972).
2. Skill in converting frustrations into problems that can be analyzed in terms of the present situation, the ideal situation, and alternative plans for moving from the present state to the ideal. For details of skills of conceiving and solving problems in groups, see Chapter 7 of the Handbook.
3. Skill in openness -- eliciting or giving information during discussion that is relevant to the task at hand. For details of the skill of eliciting information, see Chapter 3 of the Handbook where it is discussed under "receptiveness".
4. Skill in responsiveness -- stating clearly what one will (or will not) do as a result of discussion, and then doing it. This can also be stated as readiness to take action in response to a perceived need. For details of responsive skills, see sections

3.9.2., 3.9.3, 5.3, 7.6.6, and 9.6.3 of the Handbook.

5. Skill in bringing into view the personal abilities and resources of others, and of one's own. This includes the ability to reveal such diverse things as skills, ideas, desires, useful acquaintances, personal libraries, or other resources that might not be known from the routine performance of persons in their jobs. This also overlaps with "skills of communication," above, because anxiety or fear during communication often prevents resources from becoming known; see, for example, the discussion in Chapter 7. For details of skills in bringing out personal resources, see sections 3.9.3, 3.9.4, 3.9.5, 4.3.2, 5.3, 6.6.5, 6.6.6, 7.6.3, 8.3.1, 8.9.1, and 8.9.4, of the Handbook.

Very early in training (within the first half-day) we give very brief instruction (less than ten minutes) in each of these skills, and then ask participants to practice them during simulated, artificial game-like, tasks that put participants at minimal risk. That is, these game-like tasks enable participants to talk only about the game, if they wish, and to avoid opening their work-a-day behavior to discussion.* Discussion of the real working situation and participants'

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*Some details of training designs are given in Appendix 2-A, in Appendix 4-D, on pages 40-43 of the booklet by Arends, Phelps, and Schmuck (1973), and in various parts of the Handbook (Schmuck, Runkel, Saturen, Martell and Derr, (1972).

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parts in it, comes later.

As participants practice the new modes of communication in pairs and groups, they find some immediate satisfactions that are rare during their ordinary work. When others paraphrase their statements, they begin feeling that others care about understanding what they are saying. Their feelings of competence and influence rise. When others check to be sure they understanding the feelings a person is having -- feelings about taking risks in a certain direction, for example -- the person begins to feel that his or her human qualities are important to others; he or she begins to feel valued by others and connected to them as a whole person. Affection springs up. As others seek information from a group member and as they seek talents that can be put to use, as they listen to new ideas without immediately finding fault, as they accept expression of a frustration as a symptom of a group problem rather than as a nuisance from a complainer -- in all these experiences the person feels enhanced competence, influence, and belongingness. The experiences are highly rewarding.

Rewarding experiences during these first-level training episodes serve four purposes: (1) they give the participant a surer picture of the goals of the training and of what the training will be like, (2) they provide participants with some basic concepts that will make it easier for us to present more complex concepts later, (3) they increase the participant's estimate of the likelihood that the goals can be achieved, and (4) they increase the attraction of the participants toward the training. These changes in perception and attitude on the part of most participants lead them to be willing to expend energy on next steps in training and to take the greater risks that the next steps require.

As participants practice these new skills and begin spontaneously to use them in their work, new norms begin to develop. Below are some examples of changes in norms that occur -- though, as we shall see in later chapters, they occur to a greater degree in some schools than in others. Although some of these norms are not directly linked to the skills listed in Postulate 9, they are norms that we have found to emerge when first-level skills are mastered.

Norms commonly found*	New norms
Persons continually try to make their position known and to persuade others of its merits -- talking past each other and unwilling to hear what others say.	Persons continually check to make sure they understand what others are saying -- speaking to relevant issues.
Unpleasant feelings remain hidden.	Persons feel free to report directly to others if something in the interpersonal communication process is bothering them.
Feelings of others are ignored -- there is little checking to find out what they are.	Persons show concern for the feelings of others -- monitoring non-verbal cues and checking the accuracy of impressions.
Outsiders and their views are seen as a threat.	Persons really listen to views of others outside the group.
Persons take an attitude of "if we know what's going on, that's all that's important," toward other groups.	Group continually sends information to other groups so as to increase understanding.
Members are afraid to express ideas, goals, and proposals because they will be sharply criticized before consideration.	Members are eager to share goals, ideas and proposals -- knowing the contributions will be evaluated critically but respectfully.
Group fails to discover members who have special resources.	Members with special resources are identified and listened to carefully.

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*We have borrowed these contrasting statements from the introductory booklet by Arends, Phelps, and Schmuck (1973).

Second-Level Skills and Norms

So far, we have been describing interpersonal skills and norms that enable individuals to coordinate more effectively with one another in seeking rather immediate satisfactions. While discussing first-level skills, we paid little attention to the subsystem within which these skills are applied, and little to the functioning of the subsystem as a whole. We turn now to skills and norms that serve to advance the functioning of the subsystem, whether that be a teaching team, a school, a budget committee, the production staff of a school play, or whatever.

The skills that we try to impart for enabling subsystems to function effectively are shown below.*

Let the postulation of this set of subsystem skills be called Postulate 10.

1. Clarifying communication throughout the subsystem and establishing communicative links among interdependent subsystems. All parts of a school organization must learn to clarify the messages they receive from

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*These seven intermediate (second-level) goals of training were originally conceived by Richard Schmuck. We presented them to the administrators of the Kent district as our goals for the project, as explained in Chapter 2. An earlier stage in our theoretical thinking is represented by the list of hypotheses given on pages 34-35 of Schmuck and Runkel (1970). The Handbook (Schmuck, Runkel, Saturen, Martell, and Derr, 1972, pp. 343-344) gives an alternate discussion of these seven intermediate goals. We did not enter the Kent project with the first-level skills in mind, nor the third-level outcomes, to be discussed below; that part of our thinking developed later. For findings within the Kent project concerning these second-level skills, see Chapter 8 of the present book.

one another. Skill in communication can develop internal and external channels that bring in more accurate information about the environment. Ambiguity and conflict about norms and roles can be alleviated by developing more precision in the transmission and reception of information. For details of training methods, see Chapter 3 of the Handbook (Schmuck, Runkel, Saturen, Martell, and Derr, 1972).

2. Agreeing upon goals within the subsystem and revising them when they no longer serve. An effective working group does not take goals as immutable, nor challenges to them as disloyal. It takes goals to be empirical descriptions -- always somewhat inaccurate -- of the common directions in the striving of the group. Organizational members can learn to clarify and share their objectives and to increase their sense of "owning" the goals and integrating their efforts.*

   For details of training methods, see Chapter 4 of the Handbook.

3. Uncovering conflicts and, where possible, instituting norms for collaboration within the subsystem.

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*Insightful discussions of this view of planning and goal-setting have been given by March (1972, pp. 426-428) and Weick (1969, pp. 101-103).

Confronting conflicts, coping with them effectively, and exploring interdependencies will help to establish norms and roles that will aid the organization in accomplishing tasks. Norms for collaboration can replace norms for the mere avoidance of conflict, and interdependence can replace submission. For details of training methods, see Chapter 5 of the Handbook.

4. Improving procedures in meetings of the group. We mean by this point that meetings ought to be conducted in such a way as to maintain the first-level skills among the participants and to enable the other second-level skills to be exercised effectively. The lore of conducting meetings in this way is set forth in Chapter 6 of the Handbook. The increased satisfactions to be gained in effectively conducted meetings always draw early appreciation from participants in training of the sort used in organizational development. Participants are typically struck by the contrast between the old, dull, burdensome methods and the new, freeing, productive methods.

5. Group problem solving. By this we mean a subsystem reacting to stress by using systematic conscious procedures. These include agreeing on the present conditions, agreeing upon the ideal or goal, generating acceptable methods of moving from the

present state to the goal, assigning persons and dates to the steps required, and monitoring progress. Our current practice uses Fosmire's S-T-P organization of group problem-solving (unpublished). This procedure shifts back and forth among the phases of describing the present situation (S), stating the target or goal (T), and considering plans or paths for getting from the one to the other (P). This procedure shares many concepts with the D-A-P procedure presented by Nagle and Balderson (1974). For details of training methods that followed a sequence that was a precursor of the S-T-P, see Chapter 7 of the Handbook.

6. Making decisions by appropriate means. Although we usually find that groups need more training in decision making by consensus than by other methods, no one method of making a decision in a group is best for all kinds of decisions. Decision making by one person, a subgroup, a majority, a consensus, and a unanimity all have their places. For details of training methods, see Chapter 8 of the Handbook.

7. Assessing progress. If all these skills are to be productive, the group needs to be able to pause in its work periodically to ask, "Where are we now?" This skill is necessary not only in problem solving,

but in all of the six kinds of operations listed just above. For details on methods of carrying out evaluations of progress, see Chapter 10 of the Handbook.

When a group plunges into one of these seven activities, the individuals are taking greater risks than when they practice the "smaller" skills of the first level. In exercising the skills of the second level, individuals are, on the average, committing larger blocks of time and implying a willingness to be bound to more fateful decisions. The organization, too, is usually more strongly affected by second-level activities than by first-level activities. It is in this sense that we order the levels of skill and norm.

We believe that the success of the second-level activities depends to some extent upon the acquisition of first-level skills. It may not be necessary, however, that trainees learn first-level skills before second-level. It is possible for them to pick up a good deal of skill at the first level while learning the skills of the second level. This is not actually likely to happen, however, unless the group has a very skillful leader, and unless the group is emotionally ready to accept the double task. (This possibility of simultaneous learning makes it difficult to design a clear test of Postulate 9 which asserts the primacy of first level skills.)

It is at the second level that the group-in-training begins to work on its actual work-a-day problems. At the third level, it will work on the environmental problems within which work-a-day problems are embedded. The environmental problems are those located in the overall structure of the organization and in its interfacing with its community.

At the second level, individuals encounter new forms of opportunities for satisfaction. As subsystems function more effectively, the satisfactions of connectedness, interpersonal warmth, and esprit de corps come to permeate all activities, even while the satisfactions of vigorous action, influence upon one's organizational fate, and achievement of worthwhile work-goals are also being experienced. Through these satisfactions, especially that of "groupiness," the ties grow strong that will keep the group together and hopeful through many later vicissitudes and tribulations.

As participants practice the second-level skills in their work, new norms emerge. Below are some examples of changes in norms that occur. Although some of these norms are not directly linked to the skills listed in Postulate 10, they are norms that we have found to emerge when second-level skills are mastered.

Norms commonly found*	New norms
Groups pay little or no explicit attention to whether their communicative customs are helping their work.	Group pauses periodically to check whether first-level communicative skills are being helpfully used.
Goals are taken for granted without much discussion, are accepted from superiors without checking commitment at the working level, or are challenged without resolution.	Goals are carefully discussed at the working level and degrees of commitment ascertained. They are reviewed periodically and revised as necessary so that announced goals do not get out of kilter with working goals.
Conflicts are hidden and dealt with (if at all) only behind the scenes.	Conflicts are considered openly as part of the description of the present situation and as signals that it is time to ask whether an episode of problem solving would be profitable.
Meetings start late; members straggle in.	Meetings start promptly with members present and eager to begin.
Group agreements about meeting procedures exist only implicitly, are often misunderstood, and are considered openly only rarely.	Group agreements about meeting procedures are made explicit in advance.
Methods and procedural rules are inflexible or generally consist of strict adherence to Robert's Rules of Order.	Methods and procedural rules are flexible and can be readily adapted for different needs.

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*We have borrowed some of these contrasting statements from Arends, Phelps, and Schmuck (1973) and others from Postman and Weingartner (1973).

Norms commonly found	New norms
Members interrupt each other, talk at the same time, use sarcasm, and ridicule or "put-down" others to express disapproval.	Communication is open and direct, with favorable and unfavorable feelings being described explicitly.
Problems are taken to be a sign of illness; life would be better if there were no problems.	Problems are viewed as normal; solving problems is welcomed as a chance to unleash creativity for improvement.
Teachers work by themselves in isolated classrooms.	Teachers collaborate flexibly in pairs or teams.
In classrooms, students work mainly independently; grading procedures emphasize competition.	In classrooms, groups of students work together on common projects and help one another; grade procedures encourage cooperation and support.
In classrooms and staff rooms, people maintain "distance" from one another or try to impress one another.	In classrooms and staff rooms, people touch and talk to one another, expressing feelings of comradeship.
People make comments to "one-up" others, assuming win-lose relationships.	People make comments expressing the desire to help one another, assuming win-win relationships.
Teachers do not feel comfortable with other adults in the classroom.	Teachers invite other teachers to observe them or join them in teaching.
Informal discussions center on gripes or anecdotes about frustrating students.	Educational ideas are discussed in formal and informal gatherings.
Persons ignore problems or state them in a form which ignores the real issues.	Persons state the problems precisely and directly, regardless of the discomfort it causes.
Few groups form to work on problems.	People organize quickly into groups to engage in joint inquiry regarding problems.

Norms commonly found	New norms
No systematic problem-solving procedure is followed.	Procedures exist which members commonly understand and have the ability to follow.
Only certificated teachers are allowed to interact with students.	Work of teachers is supplemented by paraprofessionals, interested non-school citizens, and students.
Decisions are made only by those who possess authority.	Decisions are made by those who have information with emphasis placed on the best decision, not on who makes the decision.
Decision-making responsibilities are left unclear.	Decision-making responsibilities are identified ahead of time; all members are aware of the allocations of responsibility.
Decisions are made that affect people's lives without a chance for their involvement.	Those who are affected by a decision help make the decision.
Members often argue for involvement, but become frustrated when many meetings are spent trying to reach a decision.	Members recognize that if they want to be involved in decision-making, it will take time.
Members are not aware of various decision-making options nor are able to state advantages and disadvantages of each.	Members recognize that there are several ways to make decisions (one-person, majority vote, consensual) and identify the one that best serves a particular purpose.
Decisions that require understanding and commitment are made by one person or by majority vote.	Decisions that require total understanding and commitment are made consensually.
Teachers do not tell students explicitly how their work is to be judged; criteria are vague or capricious.	Teachers tell students explicitly beforehand, the criteria to be applied to their work and then stick to those criteria. For example, they may display good and bad work, or give pretests and discuss these with students.

Norms commonly found	New norms
Evaluation of staff is done only by superiors and with vague criteria. Evaluation from parents occurs only during crises, and unhelpfully.	Evaluation is shared widely, it is used to catalog strengths as well as weaknesses, and is used to give information useful in solving problems. Evaluation from parents and community is sought routinely.

Third-Level Skills and Norms

Why should we trouble with the hard work of organizational development? Why should we strive to achieve the new skills described on the previous pages? We believe there are two reasons. First, we value a humanistic orientation to life including the broader use of the capabilities of individuals at their own initiative and the collaborative, communal life. We would like to see schools become more satisfying places (happier places, if you will) for students, teachers, parents, and the community at large.

Second, we believe that school organizations can learn to meet the challenges of the changing times with more foresight, less ineffective wheel-spinning, and less trauma from being ambushed by change. They can build a capacity for constructive adaptation as an ordinary part of their functioning. This capacity is the opposite of "fire-fighting" or "management by crisis." It requires certain skills on the part of the school organization as a whole. This organizational ability or character is made up of four third-level skills. These are the marks, so to speak, by which the constructively adaptive school or district can be recognized.* The following skills at the

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*We take these four marks from the Handbook (Schmuck, Runkel, Saturen, Martell, and Derr, 1972, p. 345). By constructive adaptability, we mean the same thing that Gardner (1963) means by the self-renewing ability and Buckley (1967) by morphogenesis. For findings within the Kent project concerning these skills, see Chapters 7 and 11 of the present book.

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overall organizational level (and in the organization's interaction with its environment) constitute constructive adaptability and can be called Postulate 11.*

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*It might be simpler, logically, to call these criteria a definition of constructive adaptability. But we prefer to leave the criteria open to empirical attack by someone's inventive imagination in the future.

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1. Instituting problem-solving episodes when progress toward a goal is found to be unacceptable or when norms that serve constructive adaptability are seen to be weakening. This ability rests, in turn, upon many other abilities. The organization must be able to maintain sources of accurate and relevant information and maintain communication channels to convey this information accurately and swiftly to those concerned. Members must be ready to volunteer relevant information to each other, and there must be norms for group work that support effective reconsideration of goals. The organization must have the ability to uncover conflicts, and it must have the ability to carry

through a problem-solving sequence effectively once the need is agreed upon. Finally, the ability to institute problem-solving episodes depends upon all the other first-level and second-level skills we have discussed. The characteristic of the third-level skill, in contrast to the second-level skill, is that not only do groups in the school or district know how to do group problem solving, but they actually _initiate it and carry it through_ at the appropriate contingency. Being able to do this demands not only skill at problem solving proper, but also the ability to set aside the necessary time, marshal the appropriate people, and so on. Furthermore, the norms of the organization must have been modified to reward the use of problem-solving skills.

2. _Maintaining access to fresh ideas and other personal resources._* Under routine operations, many ideas and abilities are likely to remain undisplayed because they are not immediately necessary in the daily work. To maintain constructive adaptability, the organization must make occasions upon which potentially useful ideas, abilities, and talents can be exposed to

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*Buckley (1967) speaks of this organizational ability as the accessibility of the _variety pool_.

view. Some of this kind of thing can be done simply by keeping a file of personal resources. Usually, however, periodic occasions for soliciting new ideas, either in discussion or in writing, are necessary. Such occasions are parts of standard sequences for group problem solving, but the constructively adaptive organization must provide other occasions not tied to specific problems so that the potentialities of the organization can become a lively part of the imaginations of the members.

3. Taking action. This organizational ability corresponds to responsiveness at the first level. At the third or organizational level, it means making time available for working on change for extended periods, providing necessary financial support, coordinating the change effort helpfully with connected groups, and so on. Many organizations suffer from chronic planning and chronic inaction. The constructively adaptive school or district can move.

4. Assessing movement. This organizational ability corresponds to assessing progress at the second level. At the organizational level, it means using methods to chart long-term trends, assessing the different sorts of effects on different subsystems, calculating costs of different sorts, estimating impact on other

schools or upon relations with the community, and making decisions whether to continue, stabilize, or revise. In a large organization such as a very large school or a good-sized district, it may be necessary to employ assessment experts who can use sophisticated methods of collecting data and interpreting them.

Obviously, when a school or district undertakes major changes in procedure or structure -- such as instituting team teaching or the "open concept" -- still greater risks are in the offing than when making the smaller changes we mentioned when discussing the first and second levels of skill. Organizational changes, we believe, should be built upon a strong foundation of skills of the first and second sorts. We shall give some evidence for this recommendation in later chapters. Other evidence appears in the report of another project in organizational training by Schmuck, Murray, Schwartz, Smith, and Runkel (1975).

Our approach to organizational development does not offer a specific formula for helping a large school or a school district move from subsystem skills to overall constructive adaptability. Although we do offer suggestions for designing events that help schools change in this way, it is our belief that the appropriate rearrangements of subsystem functions and interrelations among them must be worked out -- tailored -- to suit the local situation with which the school or district is trying to cope. Despite this disclaimer, however, we are presenting in this book a design for one kind of subsystem -- the cadre of organizational specialists -- that we think can help any school or district perform the locally sensitive work of moving from the skills of the second level to the third. The theory of how that subsystem works will be the topic of the next chapter.

The matter of finding indicators of progress toward the third level also depends heavily on what is happening locally. We cannot offer a list of particular and specific practices or activities that should be found in every school or district that can be called constructively adaptive. The concept itself implies adapting practices and activities to special local conditions and times. In the Kent district, the superintendent's cabinet, in one year, showed its adaptability by designing a new kind of meeting to facilitate its communication with staff in the district. In Eugene Oregon, an elementary school adapted to lack of a kindergarten by reorganizing radically the first two weeks of the first grade. These examples might be inappropriate in other places and times. We shall give other particular examples in Chapters 7 and 12.

The three levels of skill and norm were not clearly in our minds when we began the Kent project and when we were writing questionnaires. The idea grew as our theoretical thinking changed during the years. As a result, the data we collected will not fit this three-level scheme as clearly as they would if we were designing the data collection anew. Nevertheless, we shall use this three-level scheme in presenting data in this book, because this is the way we now want to think about our results. We shall present evidence concerning the first level of skill and norm chiefly in Chapters 5, 6, and 7;

concerning the second level in Chapters 8 and 9 and concerning the third level in Chapter 10, 11, and 12.

Cycling

Naturally, a school or district does not merely begin by interacting on the first level and then move to the second and third. It is always making use, well or poorly of all three levels.

In Postulate 12 we assert that poor organizational processes at one level can often be rectified by re-cycling practice through lower-level skills. This postulate is similar to Alderfer's conception of re-cycling to "lower" satisfactions when frustrated at a "higher" level. We shall present some evidence on this point in later chapters. In Chapter 10, for example, we shall say something about the way schools seem to re-cycle through more and less difficult kinds of innovations.

Transition

No organization is a "tabula rasa." New norms cannot merely be added to old; they must, to some extent, replace the old and substitute for them. In organizational work, the intervener must remember that the client is embedded in a culture that continues to use the old norms. This is only one of the reasons that re-training subsystems is so much more powerful than trying to re-train individuals.*

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*It is also the reason that trying to reform education by imbuing individuals in teachers' colleges with new ideas and techniques is so remarkably ineffective.

Furthermore, when the organization is beginning to learn how to act according to the new norms, it will not at first apply them effectively to day-to-day work.

In Postulate 13 we are asserting that during transition, there will be a period of confusion between old and new norms. Productivity will go down. The feel of things, too, will be that of confusion, congestion, conflict, and general going-awry. Only after the client becomes skillful with the new norms will productivity rise and the feel of things be that of clarity, freedom, competence, and satisfaction. During the stage of transition, assessments of conditions will more often than not tell a story of lowered effectiveness and lowered perception of competence. We shall see a dramatic example of this down-then-up effect in Chapter 6.*

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*An equally dramatic example is given in Chapter 4 of Schmuck, Murray, Schwartz, Smith, and Runkel (1975).

Some Principles of Training and Consultation

Our theory has informed our designs for training and consultation. Here are some principles that we use in designing training and consultation and that we think make use of our theory.

Subsystems, Not Individuals

Skills in working as an organizational member are interactive skills, not individual skills. Consequently, the expectations of each person must be answered by the actions of the others. If four persons of a six-person team learn to work together, they will have to re-cycle their learning when the other two join them. If only one person is trained, that person faces the task of trying to influence the team to generate new interactive patterns that he or she has not yet experienced and tested with them. The efficient thing to do, obviously, is to train the subsystem as an interacting whole.

Training less than an entire subsystem is like training less than a football team or less than an entire orchestra. The team or orchestra can perform, after a fashion, but never as well as they can after the whole team or orchestra has practiced as a unit. Even if all individuals have had training separately, the necessary interactive patterns in a new group must be learned in that group. An all-star football team never goes into a game without having practiced together, despite the superb skills the individual players have shown with other teams.

All this boils down to the concept of a subsystem with characteristics of its own that are not merely the assembly of the skills of individual members. Consequently, we assemble a subsystem and train it; we do not train individuals and then assemble them. We began training in Kent (as we related in Chapter 2) with the superintendent's cabinet as a unit. We always sought, too, to train entire school staffs, never only a part. By the time we began training the cadre of organizational specialists in 1969, the subsystem concept was taking more complete form in our minds; the design of the cadre (see Chapter 4) shows strong use of the concept. Since then, we have seen repeated demonstrations in later projects (and in the work of others) of the power of the subsystem concept.

We do sometimes make one sort of exception to the subsystem rule. Principals and superintendents can exert high control over those they supervise; the alacrity, openness, and responsiveness they exhibit during training is taken by many as a signal of the support they are giving to the project and of the degree they will approve of others' participation. Also, when a group containing a principal or superintendent is working at the second level, trying to achieve coordination in problem solving (for example) and the administrator shows low skill, other members are often reluctant to point to that lack of skill and try to help the administrator improve it. This condition can discourage the group and hold back the work. For these reasons, we sometimes take a principal or superintendent aside for special coaching. Even when we do this, however, we limit the coaching of the administrator to the needs of the group he or she is working with at that time. For further comments see Schmuck (1972) and Schmuck and Nelson (1970).

In addition to the advantages of working with subsystems that we have already mentioned, there are also advantages at the individual or motivational level. As we have said, trying out new interpersonal norms requires risk. The person being trained away from the regular work group has no way of estimating confidently the risks to be encountered when he or she tries out the new ways of acting in the work group back on the job. If a subgroup of a work group undergoes training, they will have the same uncertainties about how the untrained members will react (for an example, see Starling, 1973, summarized in Schmuck, Murray, Schwartz, Smith and Runkel (1975). When all members of a subsystem are trained together and in interaction, however, they can all see how others are reacting at each small step. Not only does this reduce risk and heighten trust, but it brings quick reward in the form of the satisfactions of connectedness and esprit de corps.

Process and Task

Because our culture largely directs attention away from interpersonal processes -- how we deal with one another -- it is difficult for most people to understand, at the beginning of training, the difference between communicating about some object, person, or task and communicating about *communicating*, the difference between working on a task and working on *how* to work on a task, and so on. It takes a while for most people to distinguish, in thought and deed, between task and process. In our training and consultation, we do a lot of talking and instruction to help people conceptualize *process* in group and organization.

One way to embody or prefigure the distinction is to emphasize the role of process facilitator during training. Another way is to establish process facilitators in the district, so that when a person acting in that role is present, people understand, at least, that they are now going to pay attention to something beyond the task itself. We did this when we established the cadre of organizational specialists.

Another way to clarify the distinction between task and process is to begin, as usual, by distinguishing for trainees between ordinary norms and the new more collaborative norms, and point out that both sets are serviceable, though they are often in conflict and when this is so, they cannot be used simultaneously. Organizational groups can then be trained to move from one set of norms to the other, as the occasion demands and at their own initiative. Zand (1974) has taught managerial groups to deal with specially complex problems by moving into an "alternate organization." They then suspend ordinary norms during problem solving and use the collaborative norms until they feel the ordinary norms will again serve. We have not tried this method ourselves but we look forward to doing so.

Once the distinction between process and task becomes usable by organizational members, several satisfactions are enhanced. The clarity that comes to members about the way their roles are linked increases the possibilities for influence and their confidence in those possibilities. The new methods of moving the work along in the group and checking on its progress increases members' feelings of competence. The attention members give to the qualities of one another during the examination of communicative processes in the group enables them to feel that they are not valued merely as instruments for getting work done, but as full human beings as well.

Act, Then Think

Ordinary schooling requires the learner to conceptualize something and then do it. A college professor's approach to teaching students to ride a bicycle might be giving a series of lectures on how to ride a bicycle and then telling the students to go do it. Children actually learn to ride bicycles, however, by doing it and then talking (thinking) about it. It's true that they fall off a few times while learning, but the professor's lectures would not save them from that.

The whole tradition of organizational development, along with that of other varieties of training in interpersonal process, makes maximum use of experiential learning; that is, first experiencing a new way of acting, and afterward talking and reading about it. We follow this tradition. With this method, people can acquire concepts (and skills too) in a tenth of the time a lecture course in college would require and with ten times the effect on the job. (We know of no direct test to back up this assertion, but we feel confident in making it because of our experience as professors who have used both pedagogies.) Some indirect evidence comes from our success in teaching cadres of organizational specialists, in 200 to 250 hours, to do effective organizational work that most persons with doctoral degrees in group dynamics, organizational theory, or the like cannot do -- though we grant that the holders of the doctorates can talk longer and more reconditely than can members of our cadres.

Giving trainees experience before concepts during training enables them better to estimate the kinds of risks they are undertaking and therefore the amount of use they wish to make of the concepts when they are presented. Concepts are only talk, not guides to action, until people believe they will be doing something (or have done something) to which the concept applies.

Then, too, participating in the new interpersonal relations brings the increased satisfactions we have mentioned before, and the trainees immediately want to talk about these happy changes -- or about the stress of making them, as the case may be. They are then usually eager to have adequate concepts to use in their talking, thinking, goal setting, and planning.

Outsiders

The chief dynamic that holds schools and districts back from taking active steps toward change, as we said before, is the estimate that the costs of change, the uncertainty of future benefit, and present satisfactions seem to outweigh the kinds of benefits that might be gained. When an insider (especially the boss) tries to move people into far-reaching organizational change, that person's altruism is always suspect. For many people, especially those who believe that an organizational member can only better his or her own working conditions at the expense of others', the mere fact that an insider wants to change things is enough evidence that the change will do them harm.

In addition, no matter how well-meaning the insider's intentions may be, there will be occasions during the change when his or her own welfare in the organization becomes threatened; at those points, the likelihood is too high that the insider will take an action unhelpful to others.

An outsider (a consultant-trainer) can by-pass these difficulties to a considerable extent. The consultant has no stake in the client organization beyond carrying off a successful project so participants are more apt to go along with the consultant's request. Even those with the win-lose orientation toward organizational life are likely to go along with the consultant for fear others will learn something that will give them a competitive edge!

Insiders have advantages of their own, it is true. They "know the ropes." They know many important facts outsiders have to learn before they can become fully effective. (It is also true that insiders are often wrong about their "facts.") Insiders, too, are already functioning parts of communication channels into which the outsiders must require some time to insert themselves.

The trick is to combine the advantages, during change and during the stabilization of new norms, of the insider and the outsider. In Chapter 4, we shall explain how the cadre of organizational specialists in Kent used these advantages.

Summary

In this chapter, we set forth a number of postulates (assumptions, for the present) that we think underlie our technology for change in schools and districts. The bulk of the chapter discussed what we believe to be the important implications of the postulates. We do not claim that our reasoning is logically rigorous in the sense that it could be cast into symbolic logic.* In fact, we think such an effort would be premature, and probably not very useful to interveners even if it could be done. Nevertheless, we hope this present theoretical scheme will help readers to understand the kind of thing we were trying to achieve in the Kent project and, therefore, will make the rest of this book easier to read. We shall now recapitulate the postulates.

1. People have available more paths to further satisfactions when their behavior is active, successful in tasks, affectionate, and influential.

2. Everyone can, when learning as a member of a continuing group, learn to be more skillful in marshalling energy, achieving success in tasks, reciprocating affection, and exerting influence.

3. Interpersonal norms that maximize the satisfactions listed above will yield productivity that is not impeded by obstacles like in-fighting, back-tracking, the need for complex control mechanisms and many supervisory personnel, high personnel turn-over, and even outright sabotage.

4. The satisfaction of existence needs usually distracts people from seeking satisfaction of the "higher" needs of activity, achievement, affiliation and power.

5. As participants in a change project begin to experience the higher-order satisfactions, greater energy is likely to

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*-- as one of us (Runkel and Peizer, 1968) has done with a theory applying to cognitive consistency in two-person interactions.

become available.

6. Many essential organizational tasks require strong cooperative interdependence.

7. Making old and new norms explicit during a transition period will maximize an organization's chances of success in selecting old norms for discard and new norms for adoption.

8. Every organization must continually seek productive balance between the two directions of action, differentiation versus integration.

9. The following interpersonal skills are primary:

Skills of interpersonal communication
Skills of converting frustrations into problems
Skills of giving and eliciting information
Skills of responsiveness
Skills of bringing into view personal abilities and resources

10. The following skills enable subsystems to function effectively:

Clarifying communication
Agreeing upon goals
Uncovering conflicts
Procedures in meetings that maintain first-level skills
Group problem solving
Making decisions
Assessing progress

11. The following skills at the overall organizational level (and in the organization's interaction with its environment) constitute constructive adaptability:

Instituting problem-solving episodes when appropriate
Maintaining access to fresh ideas and personal resources
Taking action responsively
Assessing movement toward goals

12. Poor performance at one level of skill can be rectified by re-cycling practice through lower-level skills.

13. During transition, there will be a period of confusion between old and new norms.

Chapter 4

THEORY AND TECHNOLOGY II: THE CADRE OF ORGANIZATIONAL SPECIALISTS

By Runkel, Arends (R), Arends (J), and Schmuck

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Chapter 4

THEORY AND TECHNOLOGY II:
THE CADRE OF ORGANIZATIONAL SPECIALISTS

Runkel, Arends (R), Arends (J), and Schmuck

(Final)

Many good ideas for managing education more effectively can be found in educational literature, educators' plans or citizens' pleas. But the problem still plaguing all of us is how to move from an old way of doing things to a new way and maintain the new way without slipping back into the old. When the new way includes the demand that organizational members interact in new patterns and with new norms, the problem of maintaining the new organizational patterns is especially acute. The Kent project's greatest accomplishment, in our opinion, was that of establishing a new subsystem for aiding the district in organizational maintenance and change -- the cadre of organizational specialists. The Kent cadre was given its first training in the summer of 1969 and was in the fall of 1974 still operating in the manner it was designed to operate despite the lack of direct financial support from the district. In Chapter 12, we shall discuss the cadre's accomplishments and durability. In Chapters 5 through 11, we shall give evidence of its impact. In this chapter, we explain, in a way designed to help districts contemplating the formation of their own cadres, the principles we used in building the cadre.

The Problem of Initiating Change

It is easier to say that every school and district should somehow contain norms to support resilience, versatility, or constructive adaptability than to specify practical procedures to generate the necessary new norms. Indeed, some believe that changes in the ways a large body of people coordinate their actions must be left to slow evolution, and that planned interventions can hope to affect only small groups and effect only small changes.

The difficulty of imagining new norms replacing old ones, and imagining how the new norms can draw the allegiance needed to maintain them causes people to estimate chances of successful organizational change to be poor. "It won't work; people just won't act that way." We discussed this point in Chapter 3 in the section on 'First-Level Skills and Norms." It is important always to be aware of the depth and pervasiveness of this belief in the impossibility of future change. Let us leave schools for the moment and go to another domain to remind ourselves of the difficulty of imagining how human coordination might take on radically new form.

How could anyone, in the days of travel by horse, imagine that millions of drivers of vehicles could keep carefully to the right on the highway, stop carefully before entering, and race along at breakneck speeds without millions of accidents? Who would have supposed, a few hundred years ago, or even seventy, that society could organize itself to maintain highways so smooth that it would be commercially profitable to produce -- by the millions -- vehicles capable of speeds of sixty miles an hour? To put this in perspective, consider a tale from Coulton* (1961, p.35):

> In 1499 a glover from Leighton Buzzard travelled with his wares to Aylesbury for the market before Christmas Day. It happened that an Aylesbury miller, Richard Boose, finding that his mill needed repairs, sent a couple of servants to dig clay "called Ramming clay" for him on the highway, and was in no way dismayed because the digging of this clay made a great pit in the middle of the road ten feet wide, eight feet broad and eight feet deep, which was quickly filled with water by the winter rains. But the unhappy glover, making his way from the town in the dusk, with his horse laden with paniers full of gloves, straightway fell into the pit and the man and horse were drowned. The miller was charged with his death, but was acquitted by the court on the ground that he had had no malicious intent, and had only dug the pit to repair his mill, and because he really did not know of any other place to get the kind of clay he wanted save the highroad.

To almost everyone in England in 1499, surely our modern technologies of transportation would seem both unnecessary and impossible. To many today, methods of organizing human work different from the age-old hierarchical, authoritarian, competitive modes no doubt seem as far-fetched. To us, nevertheless, schools and districts more rewarding to human nature do seem possible, and far closer to realization than 400-and-some years.

Up until the present, people have tried only a few methods of changing organizational roles and norms. Below we list the six methods most commonly used:

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*quoting Mrs. J. R. Green in Town Life in the Fifteenth Century, Vol. 2, page 31.

1. Using a directive or set of instructions from someone in authority. The set of instructions can be the administrator's own invention, or can be acquired from someone else in a form usually called a "package."

2. Exhibiting a model. If an organization succeeds in establishing a new organizational mode, we often hope that it will be so attractive that others will strive to emulate it.

3. Using outside help. When change seems especially difficult, organizations can call on an "expert" to provide special technology and impetus.

4. Establishing full-time experts. Organizations can establish an expert, or a department of them, within the district in the hope that services will be continuously available.

5. Using an alternative collaborative mode. This method is that of Zand (1974), whom we mentioned in Chapter 3. He taught organizations the collaborative mode of operation as an alternative into which they could move when the usual mode was ineffectual. This method seems promising to us; it should receive further trials.

6. Establishing a special subsystem to change the organization as necessary. This is the method we are describing in this book. Our design for this subsystem differs from that of a department because its members do not work full time as members of the specialist team, because they do not press their services on the rest of the organization, and because of other factors to be described

below. This special subsystem also differs from many of the "innovative teams" that have been created to spur innovation in schools. The comparison has been described by Wyant (1972).

The first four methods of bringing about organizational change have proven weak in bringing about new norms of organizational functioning; the reasons need not be rehearsed here. Zand's has not yet been tried in schools. Our own method -- that of the cadre of organizational specialists -- was tried in Kent, and is the subject of this book. Another cadre was established in Eugene, Oregon in 1971 and is thriving at this writing. Its work will be described elsewhere. We have information -- but no systematic data -- about other cadres that are in the process of being established. We shall report on them when adequate data become available.

Let us recapitulate our view about change in schools. Clearly we do not subscribe to the view that change is inherently unmanageable or that it must be left to emerge in a mysterious way from short-term and self-centered activity. Despite the low record of success of recent efforts at planned change, we believe that methods for successful planned change are emerging. We think that the design of proper subsystems to facilitate change is the key to effective change, and we think that the cadre of organizational specialists is one example of such a subsystem. So far, we must admit, neither the Kent cadre nor the Eugene cadre can claim to have brought about any large changes that all observers would agree to be astonishing. But both have had effects that we think are promising. We shall give evidence of the effects of the Kent cadre in Chapters 5 through 11.

Constructive Adaptability in a School District

We specified the criteria for constructive adaptability in Chapter 3. We postulate that a school or district has greater versatility in coping with problems if:

it seeks to improve functioning in its subsystems (Postulate 10), not merely in its individuals,

it institutes problem-solving episodes when appropriate (Postulate 11),

it maintains ready access to fresh ideas and personal resources (Postulate 11),

it takes relevant and timely action in response to interior and exterior challenges (Postulate 11),

it repeatedly assesses its direction and extent of movement (Postulate 11), and

it is able to revive lagging skill at one level by rehearsing skills at a lower level (Postulate 12).

These postulates, as they took form in our thinking, helped us work out our design for the cadre of organizational specialists. The emphasis in these postulates is on activity by schools or districts themselves -- not on activity by a suprasystem such as a state department of education or the federal government, and not on an outside interfacing system such as a university. In other words, our theory does not expect energy for change to come from some outside agent, but from within the organizational "home" within which people do their work. Our theory does not leave change to insensate nature or to Big Brother. It allows that a school or district must, of course, cope with its natural and social environments, but it puts small weight on the ability of the environment to determine the course of change in schools. Instead we theorize that the more significant initiatives for change are within the school or district. Further, our theory implies that schools and districts operating with customary organizational norms cannot have much hope of carrying strong organizational change into a new stability. Our theory implies that schools and districts that wait for a crisis and then call for outside help may arrive at only patchwork solutions to problems. Consequently, one of our problems as intervenors in the Kent district was to provide "outside" help from an "inside" source -- before a crisis situation developed. Another was to make organizational help readily available without having it imposed when people were not ready for it. These challenges and others that we posed for ourselves will emerge below.

Two Ways to Look at the Cadre

In this chapter, we shall look at the cadre in two ways. Sometimes, we shall look at the cadre as a device for facilitating organizational functioning in school and district. From this viewpoint, we shall be examining its success in helping other subsystems. This will be the viewpoint in Chapters 5 through 11. At other times, we shall look at the cadre as a new kind of organization in itself.

From this viewpoint, we shall pay attention to its internal functioning as a subsystem having some degree of constructive adaptability within itself. In Chapter 12, we shall examine the cadre's success in maintaining itself as an entity, maintaining its functions as originally conceived, and adapting itself to outside pressures in a constructive manner. We shall also touch on some of these matters in the present chapter.

What We Mean by a Cadre*

A cadre of organizational specialists deals with process rather than content. It does not tell schools what to do but rather, how to do things. The cadre does not try to get school staffs and other groups to adopt specific curriculum changes, staffing patterns, or teaching techniques. Instead, the cadre helps these groups overcome interpersonal and organizational constraints that often frustrate the best intentions and well-laid plans. The cadre helps groups marshal their own resources for making wise decisions about what to do and helps them create ways of working together to reach their goals. In short, the cadre's major task is to facilitate effective action.

Because no two client groups are exactly alike, no two interventions by a cadre are identical. The selection and pacing of specific activities depend on what has already occurred and what needs to happen next; continual assessment and planning enable the specialists to design each intervention to fit the needs of individual groups.

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*This section and some others in this chapter follow Arends and Phelps (1973).

There are, nevertheless, four fairly distinct phases* through which interventions cycle. In a rough sense, most interventions progress from one phase to the next, although the issues involved in each phase recur in new forms in later phases. In the first phase, the emphasis is on increasing interpersonal openness and trust. Clients learn skills such as paraphrasing, describing behavior, describing their own feelings, checking their perceptions of the feelings of others, and giving and receiving feedback. In the second phase, the emphasis is on increasing the awareness of interdependence among group members. By exploring and identifying common goals and the group processes that enhance movement toward those goals, group members discover how to build a smoothly functioning, task-achieving team. In the third stage, group members clarify and establish their common expectations. They build norms that encourage the management of conflict, systematic problem-solving, and participatory decision-making. In the fourth stage, the roles, procedures, and structures to be used by the group are designed and clarified.

We list below the necessary functions of a cadre of organizational specialists. This list parallels the second-level skills that we postulated as necessary in Chapter 3 and the goals we formulated at the outset of the Kent project.

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*The phases given here are similar to those given by Tuckman (1965).

Organizational Specialists Provide Training to Improve Communication within the District

Specialists put a great deal of emphasis upon improving the communication skills of the district's employees, students, and parents. In addition to their work with intact groups, the Kent cadre taught communication skills through in-service courses to over 200 staff between fall of 1969 and spring of 1971. Specialists do not merely present the skills as abstract concepts. They lead clients through structured exercises so they can practice the skills and gain appreciation of the benefits of two-way oral communication in structured activities and learning games. Specialists then observe and provide feedback as the clients continue to practice the skills while they work on regular tasks. While much of the specialists' emphasis is on improving interpersonal communication *within* groups, they also help clients improve the quality of communication *between* groups in the district.

Organizational Specialists Help Groups in the District Develop New Ways of Solving Problems

Specialists attempt to increase the problem-solving effectiveness of client groups by teaching problem-solving skills and by helping to create group norms and structures that support continuous, systematic problem solving as a regular part of the clients' work. Specialists try to work with client groups over extended periods of time, so that systematic problem solving can become an integral part of the client's way of working. Through 1972, however, the Kent cadre had not succeeded in carrying on any very long-term consultation with a school or other subsystem. The school that received the most training (of any sort) received only 46 hours.*

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*In Eugene, a few groups have had more than 40 hours of workshop training and 40 hours of follow-up consultation.

Organizational Specialists Help Groups Develop New Ways of Assessing Progress toward Goals

Specialists teach three practices to help client groups become more capable of monitoring progress toward goals. First, specialists encourage groups to define goals clearly. By helping clients write behavioral descriptions of where they are and where they want to be, specialists help groups define the present situation clearly and get a distinct picture of what would be better. Second, specialists help groups reach consensus on goals. By teaching surveying, brainstorming, and other procedures, specialists help individuals share their goals so that groups can identify common goals. Third, specialists demonstrate and teach clients to use simple, systematic procedures for getting and sharing important information. Clients can learn how to survey group members' opinions and feelings in meetings, how to use written instruments for collecting information, how to interpret the information collected, and how to share the information in a useful form. By learning to collect and use valid information, client groups create a stronger foundation for decisions and actions and enable many members of the district to participate in setting goals and monitoring progress toward them.

Organizational Specialists Help Involve People at All Levels in Decision Making

Specialists show groups that decisions can be made in various ways, and they help groups clarify and agree upon the appropriate methods to be employed in various circumstances. They urge groups to try for consensual decisions when broad-scale understanding and commitment are required and to define clearly the decision-making responsibilities of individuals and subgroups for other kinds of decisions. The goal is to disperse decision-making power optimally so that decisions are made on the basis of access to information and stake in the outcome rather than on the basis of simple official authority. Specialists know that some decisions are best made by individual administrators or by representative leadership groups; the important thing is to match the style of decision making to the issues in an appropriate way. Our impressions are that the cadres' interventions have helped improve decision making and have helped disperse participation in decision making, but we have no data on the actual number of people involved in district decision making.

Organizational Specialists Provide a Source of Fresh Ideas on Organizational Procedures and Structures.

One often finds that meetings of people in schools -- faculties, committees, PTAs, etc. -- are chaired by administrators and exhibit one-way communication, low participation of group members, and reliance upon Robert's Rules. Specialists can help groups that are dissatisfied with the usual procedures by teaching them alternatives such as developing an agenda with the group, using fishbowls and small groups to increase participation, rotating the position of convener, brainstorming, and employing surveys and communication skills. This kind of training can help groups get work done with less wheel-spinning and more action, and can give group members a feeling of success, involvement, and competence.

Specialists can also help groups build teaching or leadership teams, ad hoc committees or work groups, and other structural arrangements that allow them to make the best use of the human resources available. With continuing work groups such as teaching teams, specialists give particular attention to building clear norms for interpersonal communication that will maximize the use of talents and bring maximum personal satisfactions from participation. With temporary groups charged with a particular task, specialists give most attention to clarifying goals, monitoring progress, and reaching clear decisions, to which people feel strongly committed. In either case, by helping groups identify, clarify, and negotiate role relationships, specialists help their clients develop creative solutions to the organizational problems they face.

Organizational Specialists Help Groups Convert Innovative Ideas into Reality

Using frequent and long-term consultation whenever possible, specialists help subsystems undertake innovations where there is initially little hope for change and help make it more likely that appropriate changes will be supported by those affected. Organizational specialists marshal organizational resources for converting innovative ideas into reality. For example, in 1969 Kent elementary schools were being pressed to undertake team teaching, differentiated staffing, and the like. We shall see in Chapter 10 that the trained schools best succeeded in actually achieving norms and structures that satisfy the performance criteria for this kind of innovation.

Groups the Organizational Specialists Help

In general, specialists provide training and consultation to any intact work group that concerns itself with the district's business. Interested persons invite specialists to attend a meeting of their group to explain or demonstrate the services they can provide, while the potential client group clarifies its goals, ascertains its commitment to undergo training, and makes agreements about when and where the training will occur. This section includes examples of work done in Kent and Eugene that grew out of such initial ("entry") meetings.

Building staffs. Up to and including the year 1973, the Kent cadre had worked with staffs of 8 out of 15 elementary schools. Some staffs request training and process consultation to improve communication, problem-solving, or effectiveness of meetings, while others ask specialists to help them open up communication with parents, open a new school building or a new school year, or move to some new organizational pattern.

District-wide groups. Many work committees in school districts are composed of persons from different buildings. These groups form because the members have similar roles in different buildings or because they volunteer to perform a special task for the district. Kent specialists have put a major part of their energy into work with this kind of client group. They have planned and facilitated meetings between top administrators and district personnel on several occasions. They have also worked with the Social Studies Advisory Committee, the Foreign Language Committee, and the Representative Council and Executive Board of the Kent Education Association.*

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*For similar information concerning the Eugene cadre see Arends and Phelps (1973).

Central office groups. Most districts have a number of employees who are not assigned to particular buildings but work instead for the district as a whole. Some of these groups, such as curriculum coordinators or program directors, may request assistance from organizational specialists.

The Kent cadre provided training and consultation to the superintendent's cabinet. This intervention led to opening cabinet meetings to participation by representatives of several district groups (see Chapters 2 and 12). They also worked with the staff of the Curriculum Development Division in the Central Office.

Students and parents. Specialists can also provide training and consultation to groups of parents and students. Kent specialists initiated a multi-ethnic camp for area high school students in

September, 1969. By May, 1971, approximately 220 students had attended camps conducted by specialists. In addition, Kent specialists conducted a workshop to promote cooperation between PTA presidents and building principals, facilitated a seminar at which the superintendent and citizens discussed budget problems, and facilitated meetings and provided training for the area's PTA council, League of Women Voters, and the Model Cities Council of Tacoma (see Chapters 2 and 12).

In-service courses for individuals. Although specialists focus their attention on intact groups, they provide training for interested individuals as well. The Kent cadre has offered in-service courses like those described in Chapter 2. These courses consist of a three-phase sequence in communication techniques, group processes, and consultation.

The foregoing has been a sketch of the work of a cadre of organizational specialists. A list of the interventions accomplished by the Kent cadre from 1969 to early 1973 is given in Appendix 4-A. We shall specify the norms and structure of the cadre that support it in its work in the later sections of this chapter on rules and values. In the next section we will discuss the phases involved in the establishment of the Kent cadre or any cadre of organizational specialists.

Establishing the Kent Cadre

This section discusses six phases in starting a cadre of organizational specialists within a school district: (1) identifying goals and organizational resources, (2) selecting the means to train the cadre, (3) finding a coordinator, (4) recruiting members, (5) training the cadre, and (6) evaluating the training. The section is written in a way designed to help districts contemplating the formation of their own cadres.

Identifying Goals and Organizational Resources

A district may decide to institute a cadre for organizational development for two reasons. The first is to satisfy a general need for organizational development training and improvement of organizational structures and processes. The second is to help solve a specific problem or achieve a specific goal such as Kent's need to clarify roles and to improve communication within the superintendent's staff and between that staff and schools.*

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*See Chapter 2; also Schmuck, Runkel, and Blondino (1970); Wyant (1972 and 1973).

When members of a district begin to think seriously about instituting a cadre for general organizational development in their district, they can test their readiness to do so by stating clearly their reasons for believing a cadre of organizational specialists to be preferable to other options -- for example, to hiring outside consultants indefinitely or to employing one or two full-time specialists for the district.*

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*Comparative costs of these methods are estimated in Appendix 4-B.

Other specific goals that may be facilitated by the institution of a cadre include the wish to involve more parents in decision making or school management, build new alternative schools, adapt to pressures of rapid growth or changes in the characteristics of the school population, or find new means of financial support.

Below, we discuss factors that support the establishment of a cadre of organizational specialists. These factors echo the postulates we set forth in Chapter 3 about the bases for effective organizational functioning.

Clear and shared goals. Whatever objectives a district has in mind, we believe that they need to be as clear as possible and held by the greatest number of people possible. Clear goals provide the target toward which energies can be directed. Shared goals are also important; a superintendent or anyone else who imposes a group of organizational specialists on unwilling or unknowing employees will find his or her effort no more successful than any other innovation introduced by fiat.

We postulated in Chapter 3 that establishing clear and shared goals is a skill of a constructively adaptive organization. If a district takes care in identifying its goals when thinking of establishing a cadre, it will heighten its readiness to make use of the cadre once the cadre is ready to go to work.

Financial support. Financial support from the district is important in three ways. First, of course, money supplies energy (we discussed the release of energy in Chapter 3). Second, allocating money to the cadre is a mark of top administration's strong commitment to the project. This, too, increases the readiness of the district to make use of the cadre. Third, the act of allocating funds to a program makes it more visible and aids communication.

The first steps in establishing the role of organizational specialist in Kent had already been taken when the school board approved the original contract, but it was imperative that the role be supported with released time, a part-time coordinator, and the official blessings of the district. There were several tense moments when the teachers were negotiating for a new contract and early reports seemed to indicate that adequate money might not be available -- but commitments to the project were high, and the matter was resolved with ten days allotted to each specialist for OD work during the school year. Further, a part-time coordinator was appointed.

Establishing and maintaining a group of internal organizational specialists does not require a major outlay of money, but neither can it be accomplished without some financial support. In Kent, the cadre has managed to stay alive on a budget that in most years has been about $8,000.

Awareness by key people. Although a program for organizational development need not emanate from the top echelon of a school district, support from the superintendent and other key decision makers will of course increase the program's chances of success. In fact, any show of reluctance from the superintendent's office will pretty well guarantee the collapse of the project. In Kent, as we mentioned in Chapter 2, the superintendent and his cabinet participated in the first training event. The superintendent frequently stated his support of the project and when the cadre was instituted, he made a supportive announcement in the district bulletin.

It is also helpful if many others throughout the district are aware of the nature of the work of the cadre. They need not have had a great deal of experience in organizational development, nor need they know anything about the theory. It is only necessary that they be able to communicate something about the nature of the work. It is even better if some persons already desire training as specialists even before the cadre is formed, and if one or two groups want organizational training or consultation from the new cadre. In Kent, we had conducted training with a number of groups and schools, and this spread a useful amount of knowledge about OD work throughout the district.

Readiness. A cadre is more likely to have work to do, and a better chance of doing it successfully, if there exists a good level of readiness someplace in the district. One characteristic of readiness is a moderate level of stress. People must be somewhat dissatisfied with the present state of affairs if they are to consider putting effort into change. On the other hand, a time of severe crisis is a poor time to try to establish a cadre; people are not likely to have the patience to wait for the long time it takes for a cadre to become effective -- especially to become sufficiently effective to deal with the problems of severe crisis.

Other signs of readiness are a desire to work collaboratively and a willingness to accept deviant opinions and emotional communication as useful. We discussed these and other signs in Chapter 3; we shall return to them in Chapter 7, where we shall also give evidence on the levels of readiness of several elementary schools in the district.

Demonstrations. To increase awareness of the nature of OD, it is often useful to demonstrate the goals, techniques, and benefits of OD. In some districts, where no previous OD training has occurred, demonstrations may be the only available way of increasing awareness. In Kent, however, the training events we described in Chapter 2 served instead.

Selecting the Means to Train the Cadre

There are two reasons that we think this is a crucial issue. First, the competencies developed by internal specialists during training will determine, in large part, their ability to be helpful to the district. This is especially true because with their earliest clients, trainees often merely pass on their own training, so the training they receive needs to be similar to the training they will give others. Second, since the cadre must develop into an effective subsystem of the district, the training and consultation cannot be simple, short-term processes. They must be many-level processes which will help specialists develop structures and norms through which they can upgrade skills, replenish their ranks, and by which their functions and roles can be integrated into the district. The cadre member's role is a complex one that includes several kinds of skills and competencies that take time and practice to develop; further, we think that new cadre members learn best by practicing their skills in real interventions under the tutelage of an experienced consultant. Accordingly, those who train the specialists should be willing and able to make a long-term commitment (spread out over eight months or more) to institutionalize the cadre. The problems on the Kent project stemming from our own lack of experience lead us to say once again that this kind of work is not easy, and the more competent and experienced the trainers of a cadre can be, the better.

There are several sources of experienced consultants. First, there are skillful and knowledgeable private consultants who can be employed on a long-term basis to help train and integrate a cadre of internal specialists.* Second, National Training Laboratories (NTL) has programs to train organizational development consultants. They do not help integrate such persons into an organization, so a district using their training would have to find other means to do this. NTL laboratories are held only at limited times and in a limited number of places, and districts have to fund the costs of NTL training.

Third, the Improving Teaching Competencies Program of the Northwest Regional Educational Laboratory (NWREL) has developed a series of courses, partly self-instructional, called PETC, to prepare educational training consultants (Pino, Emory, and Jung, 1973). Through training in workshops and using the specially prepared materials in these courses, individual internal specialists can be almost immediately useful in their own districts and can, over perhaps a two-year period, develop the competencies required of organizational development specialists.* However, like the NTL program, the PETC strategy is not designed to help districts overcome many problems related to installing and maintaining the specialists as a subsystem of the district. The district has to deal with these difficult problems alone.

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*Names and qualifications of some of these persons can be obtained by writing the program on Strategies of Organizational Change at CASEA or by consulting the list of persons and agencies in the appendix of the book by Schmuck and Miles (1971). Also the International Association of Applied Social Scientists has a large list of consultants. This can be obtained from the NTL Institute, P. O. Box 9155, Rosslyn Station, Arlington, Virginia 22209. Fees typically range from $150 to $350 per day. Generally a consultant of high caliber can be hired for a long-term contract for much less per day.

If outside consultants are chosen to help create a group of internal organizational specialists, it is important to give them information enabling them to assess whether or not the project has clear objectives and goals, the support of key personnel, and the other resources we mentioned earlier. The district's leaders should assess the motivation, competencies, and resources of the external consultants before establishing the contract for training. The contract itself can be limited to the initial training period or can extend through the time that the newly-trained specialists make interventions with other groups and become a working subsystem of the district. Whatever the agreement, it should be clearly spelled out in advance. At its best the contract would be a written document listing the goals of the collaboration between outside consultant and the district, the obligations of each, and a clear statement of what resources (money, prestige, logistics support) are being exchanged. The agreement between the Kent district and the CASEA trainers was described in Chapter 2.

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*Many of these competencies are described in detail in the Handbook of Organization Development in Schools, (Schmuck, Runkel, Saturen, Martell, and Derr, 1972) a product of CASEA that accompanies the PETC program.

Finding a Coordinator

Before specialists are selected and trained, districts must find someone to coordinate the project. At first, this person might be responsible for building awareness and support in the district, recruiting potential specialists, and negotiating with clients. After specialists are chosen, this person will need to coordinate the efforts of the cadre and link specialists with the outside consultants, with others in the district, and with each other. Ideally, the person should understand organizational development, have experience as a consultant-trainer, be familiar with the working arrangements of school districts and cadres, and have skills to coordinate the efforts of diverse individuals and groups. This collection of skills may be rare in school districts, but the essential skills of the cadre coordinator are merely those needed for leading adult work groups. The coordinator ought to have some leadership and administrative talents, a high tolerance for coping with the uncertainties and frustrations that are inevitably encountered in creating new groups, a high degree of trust and respect from colleagues in the district, and demonstrated abilities in successfully working with others at difficult tasks. Skill as a trainer or consultant is important but not paramount; the critical dimension is the person's ability to link the cadre with other district groups and to coordinate the cadre's efforts.

In Kent, the Coordinator of Language Arts emerged as an invigorating leader among those who wanted to join the work of the cadre. He exhibited many of the qualities we have just listed. Since he left, three other capable persons have held the position of coordinator.

Recruiting Cadre Members

Once the training plan for a cadre of organizational specialists has been developed, efforts to recruit potential members begins. The recruiting strategy should be designed to inform the greatest number of people possible and to give potential members a chance to ask their questions and ascertain their own commitment before volunteering to undergo the training. Some may perceive the training as an opportunity for personal growth but may lack the commitment to serve as specialists after training. Others might view the organizational development project as still another district effort to improve a specific curriculum or implement some other technical innovation. Still others may perceive the project as a sly move on the part of the bosses to increase the docility of the workers. It is important that much two-way communication occur, since it is likely that many district educators will be unclear about organizational development and about organizational specialists.

In the spring of 1969, information was circulated throughout the district that a workshop would be held in June for Kent personnel who wished to become organizational specialists. The mimeographed circular stated that the specialist would become knowledgeable and skillful in group processes. He or she would serve on committees to give feedback or as a trainer for special groups within the district. We hoped that personnel from all hierarchical levels would volunteer to become organizational specialists.

Applications were solicited from all professional members of the school district. Twenty-three district personnel were selected from those who applied. They represented a wide cross section of the district: teachers, counselors, principals from elementary and secondary schools, curriculum and student personnel specialists, and assistant superintendents.

Several additional issues should be considered as potential specialists are selected. First, common sense suggests that cadre members should actually want to become members. It is especially important that potential cadre members demonstrate strong motivation and understand the extent of the commitment asked of them when it is expected that specialists will take on cadre duties in addition to their regular, full-time jobs.

Second, consultation competencies or the ability to learn these skills is also needed. While many of the skills can be taught in training workshops, the scope of the training task and the amount of time it takes will depend on the prior level of skill and understanding of the trainees.

Third, the applicant's past history in the district is also important. Persons who have exhibited leadership abilities, who have participated in other innovative projects, who have high visibility in the district, and who have good rapport with administrators and teachers should find it easier to help others once they are established as specialists. It may be that a few persons can be found who have a wide variety of strong points; the important thing, though, is that the cadre include a balance of strengths and resources that can contribute to its overall effectiveness.

Fourth, to insure communication with all sectors and levels of the district, as well as to elicit wide support, cadre members should be recruited from all job levels and from a number of schools. Other membership criteria may be assigned less weight to create a group that contains representatives of important role groups. This balance is particularly important if the specialists are to help one another understand the organizational forces and problems within the district, provide ready-made links to various groups within the district, and reduce the likelihood that the specialists will be perceived as representing the interests of a particular group. In addition to role balance, districts might also wish to pay attention to sex, race, age, years of experience in the district, membership in professional organizations,or building assignment. Jobs represented in the Kent and Eugene cadres in 1969 and 1973 are given in Appendix 4-C.

Finally, Macbeth's (1971) data show that when applicants for membership in the cadre rate themselves high on ability to have influence on others in the district, such people are likely to show significantly less defensiveness than other trainees during training, are likely to be rated more effective than others by fellow consultants when working as a consultant, and likely also to be rated more highly effective by clients. Presumably, such people are more optimistic than others about receiving rewarding responses from those they seek to influence. Such people are invigorating team members, since this kind of confidence is a part of the charisma we mentioned in Chapter 3.

Training the Cadre

As we said in Chapter 3, the first-level interpersonal skills are the most basic skills, and the second-level skills enable work-teams to improve their functioning. Concommitantly, mastering the first-level skills opens the perceptions of trainees to new sources of satisfactions, and mastery of second-level skills gives the confidence that organizational groups can achieve tasks they could not achieve before. Consequently, it is important that a new cadre be given a concentrated period of training that consolidates fairly well the first-level skills and gives a good introduction to second-level skills. The Kent cadre received two solid weeks of training in June of 1969 and short follow-up consultations until March of 1970. Training for the cadre is described in Chapter 2 under the section "Launching the Cadre." A detailed schedule of the June 1969 training is given in Appendix 4-D. A schedule of training for the Eugene cadre can be found in Appendix 4-E.

Our training design exhibited certain deliberate features. (1) Each activity had multiple objectives so that individual understanding and skills could be developed in a relatively short time.

(2) Cadre members learned about OD by experiencing it as a client group. (3) Many activities were included to facilitate team building. This feature was extremely important, since the objective was to train a group that could operate as a subsystem of the district rather than a loose confederation of independent specialists. This subsystem character was produced among the specialists by giving them tasks during training that increased their interdependence and their readiness to call upon one another for help. The subsystem character, in turn, made it easy for the specialists to allocate duties, establish and disband subteams, and call upon the resources of one another on short notice. (4) Lecturettes and readings increased understandings, while practice and experiential learning emphasized skills. (5) All activities were designed to be self-analytic, self-reflexive, and self-directed. The CASEA trainers provided the structure and offered observations of group processes, but the cadre members themselves performed a variety of tasks while noting their own processes and drawing conclusions about them. (6) Structured activities such as games, simulations, and role-playing used in the early days of training were gradually replaced by procedures and skills more useful for accomplishing real tasks. Once major concepts and skills had been introduced, cadre members were expected to apply these to their own work together. (7) Cadre members worked in groups, allowing them to become well enough acquainted with one another to build cohesive interactions within teams and the cadre even in the face of their differences in job and status.

We worked with the Kent specialists during the first two-thirds of the 1969-70 academic year, withdrawing in March 1970. Thus, we observed and criticized the training events that they engineered. This collaboration was part of a deliberate plan to support the development of training skills within the specialist team. Approximately ten different training events occurred with our assistance. Most of these events were successful in raising interest in the district in improving communication, group processes, and organizational problem solving.

In the process of training, the cadre will be able to profit best from its experience if it learns ways of assessing its own performance -- an aspect of both second-level and third-level skills. We did not do a good job of providing the Kent cadre with this skill, but it succeeded in learning a good deal on its own.

Evaluating the Effects on Trainees

Macbeth (1971) collected data on the trainees before, during, and after the summer training. On the basis of ratings by CASEA trainers early and late in the two weeks, statistically significant gains were found among trainees in communication skills, interpersonal effectiveness, sensitivity toward interpersonal phenomena, diagnostic ability, and action skill. This finding is weak, of course, because the trainers' ratings were surely affected to some extent by their own hopes. Others of Macbeth's findings were more interesting.

Predictors of effective organizational specialists. When subteams of the cadre began to do training in schools and other places in the district during the fall of 1969, Macbeth went along. After each training event, he asked participants to rate each cadre member on relative effectiveness as a trainer. The strongest correlations between the ratings by these client groups and other variables were these:

with perceived ability of self to have influence on others in district	+.39 ($p<.05$)
with perceived ability of self to have influence as member of the cadre	+.40 ($p<.05$)
with years in present position	+.53 ($p<.01$)
with being female	+.48 ($p<.01$)

Perhaps the two kinds of perceptions, listed first, reflect an invigorating quality that is part of charisma as we described it in Chapter 3 (compare the discussion by Smith, 1972). Perhaps raters in the client groups were reacting to this optimism. Turning to the next variable, perhaps a person who stays more years in a position (and is the kind of person who would volunteer for a cadre) becomes more trusted by others, and begins to exhibit the expectation that others will trust him or her. This variable of years in position does not merely reflect the status of the job; Macbeth found that the correlation between rating by client group and status of the cadre member's job in the district was -.39 -- that is, significantly negative. The fourth significant variable was that of being female; we have no explanation for this result.

Macbeth examined a number of variables concerning amount of participation during initial training. Although some of these showed positive correlations with performance in the field as rated by other cadre members, only the predictor variables listed above had significantly positive correlations with rating by members of client groups.

One should not conclude, however, that the training had little to do with effectiveness later on in field situations. Even though our measures of learning were weak, we are satisfied that there was a general improvement in consulting skill as a result of the initial training and the follow-up supervision in the ensuing months. The point of Macbeth's correlations is that there were only a very few variables that separated those who were seen by clients as more skillful from those perceived as less skillful. It is interesting that two of the variables had some flavor of charisma, and another (years in present position) facilitated entry of specialists into client groups. These qualities, charisma and building trust during entry, are factors we described earlier as being likely to improve the effectiveness of organizational consultants.*

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*For a discussion of charisma see Chapter 3.

Personality. Macbeth assessed four personality variables: need for affiliation, need for achievement, flexibility, and ego strength. Before training, the trainees filled out questionnaires that assessed the four personality variables. Then, during the initial training of the cadre, trainers made ratings of the performance during training of the cadre trainees. Calculating correlations between each of the four personality variables and the trainers' ratings of performances during training, Macbeth found that all four personality variables correlated positively (that is, the higher the score on the personality variable, the better the rating of performance of a trainee).

Later, however, Macbeth looked at the ratings of performance given by clients later in the year when cadre members went out to schools to do consulting and training. Here the only personality variable that showed significant correlation with performance rated by clients was ego strength, and that correlated negatively (that is, the higher the score on ego strength, the lower was the rating of a cadre member by the clients). Perhaps the reason for this is that persons high on ego strength rubbed clients the wrong way. If so, this is not surprising. New organizational consultants high on ego strength might be more ready to take risks than many of their clients. They might seem too brash and pushy to many. The more skillful of these specialists, after further experience, however, might learn to assess more accurately the readiness of others.

Recruiting. Macbeth also discovered that cadre members in positions of high formal power did not have much time to spend training clients. They were helpful, however, in bringing official support to the cadre's work, finding potential clients, and designing interventions, and Macbeth recommends that they be recruited for work in these areas rather than to participate in actual interventions.

Macbeth also makes another recommendation concerning recruiting based on the variables he mentioned earlier as predictors of effective organizational specialists. He recommends selecting persons to join the cadre who perceive themselves as likely to have high influence, who want very much to join the cadre, and who have been in their present jobs relatively long.

Rules for the Cadre

If a cadre of organizational specialists is to truly understand its rules for functioning (and not merely act mechanically or by rote), and if it is to be able to teach its mode of operating to others, its rules must have a firm theoretical basis.

Looking back, it seems to us the design and conduct of the Kent cadre observed the postulates of Chapter 3 very well. The cadre's internal functioning, its own training, and the training it gives others all rest on the theoretical assumptions set forth in the postulates. For instance, regarding Postulate 1, the cadre's training contained many activities and exercises designed to make members more active, successful, affectionate and influential; as members work together, they consciously aim toward fulfilling their own needs for activity, achievement, affiliation and power, and they continually give each other feedback on whether these needs are being met; and as they train others, they help their clients learn how to fulfill their own needs for these satisfactions and urge them to give each other the same kinds of feedback about whether their needs are being met.

Also, we took care to train the cadre and to specify its manner of working so that it would take on the character of a subsystem (Postulate 6). We taught it to teach others to convert frustrations into problems (Postulate 9, Number 2). In itself, the cadre became a path to resources not previously as easily available (Postulate 9, Number 2). Unlike a rule-bound bureaucracy, the cadre could respond quickly and helpfully (Postulate 9, Number 4). Further, and as we had hoped, the cadre checked the efficacy of its own work and set the example for others to do so (Postulate 10, Number 7). It displayed skill at the first and second levels and offered help at either level (Postulates 9 and 10). Similar connections can be made between the postulates and almost all other phases of the cadre's activities.

Below are the chief rules the Kent cadre came to follow or try to follow. We think they fit our theory, and our experience has caused us to believe that not following these rules led to problems. We recommend them for any cadre of organizational specialists.

Draw Organizational Specialists Part-Time from All Ranks

During most of the week, in Kent and Eugene, the members of the cadre carry out their major jobs as teachers, counselors, principals, central office administrators, and so on. The fact that cadre members are drawn part-time from all ranks brings them some of the advantages of being an insider. When a client knows that the cadre member has a regular job in the client's own district, the client need have no worry that the specialist (unlike an outsider) may use the district for his or her own purposes and then never be seen again. Furthermore, the cadre member is unlikely to help one group in the district solve their problem at the expense of some other group, because the other group may be a client tomorrow.

A second advantage to the part-time-all-ranks structure of the cadre is that it expands the available resources. Members of the Kent cadre brought with them special knowledge; each member was a source of information about the norms in his or her school. Beyond the knowledge and skill they brought with them, they could reach out in several directions for still more resources -- for example, through liaison with the local education associations and through access to the superintendent and his cabinet.

Finally, this structure for the Kent cadre gave it very useful communication links. Each member became a channel of communication between the cadre and the part of the district where he or she was regularly assigned. It is true that cadre members sometimes trusted their own "inside information" more than they ought to have done without further checking. On balance, however, this network of already-established channels of communication remained an advantage.

Do Not Consult in Your Own Subsystem

To maintain the advantages of the outsider, the Kent and Eugene specialists have always made it a rule to consult only outside the subsystems in which they have their regular jobs. That is, if a teacher teaches in school A, he or she is prohibited from acting as an organizational specialist in that school. A member of the superintendent's cabinet may not give organizational consultation to the cabinet. We found in Kent that members of one school would accord trust and confidence to an organizational specialist employed as a teacher in another school in much the same way that they will give trust and confidence to an outsider such as a consultant on fee. This is because they know the consultant won't be a member of the subsystem long enough to benefit from selfish manipulation of the situation as an insider might.

Make the Cadre into a Visible and Differentiated Subsystem

If one feature of a cadre of organizational specialists had to be picked out as most important, we might say that the first necessity is that the cadre become a highly interdependent, collaborative, mutually supportive team with the capacity to form subteams characterized by equally strong esprit de corps. Members must have confidence in the abilities of one another, and they must trust one another to carry forward the group's goals. This mutual confidence and trust should be sufficiently thorough that specialists can form subteams quickly when a request for consultation is received. The Kent cadre succeeded in developing this kind of group strength. The best evidence that it did so is the fact that it is still operating, despite having to work through several severe threats to its existence. We shall describe these threats and the Kent cadre's reaction to them in Chapter 12.

It is important that the cadre not only become a subsystem of the district (in the sense described in Chapter 3), but also that it be seen as such by others. It should be viewed as a group carrying out legitimate and important activities. It should have a supporting budget and be known by others in the district to have a budget. It is important too that the cadre be viewed as a subsystem that has permanence and identity that transcends its present members. Everyone should understand that it is not merely an aggregate of talented individuals but rather an established subsystem that embodies a function of the district. It is also important that it be very clear that anyone filling the cadre's criteria can join, and that it is not a closed in-group or clique.

In addition to developing cohesiveness and integration, the Kent cadre also developed differentiation. A norm was established early that maintained respect for diversity among the specialists. As early as the end of February, 1970, the steering committee of the organizational specialists had stated that a member of the district could participate in the work of the specialists in several ways: (1) as an occasional observer and reporter, (2) as an instructor of an inservice course, (3) as an active member of a team of specialists in a particular OD intervention but not as a regular member of the specialist group with duties to the specialists as a body, (4) as a regular member of the specialist group, and (5) as a regular member with additional duty as a member of the steering committee. This encouragement of diverse roles within the specialists enabled them to make optimum use of the talents and time of each person who worked with them. Moreover, the gradation of responsibility among the roles provided a natural channel for developing new members of the body as a whole. However, this flexibility probably shrank during 1972-74, when the district administration became loath to spend money for anything not easy to explain to the taxpayers. Recent communications from the Kent cadre have indicated that active members feel somewhat burdened by those who are only minimally active and are taking steps to tighten the membership to only the most active members, especially since it is now difficult to obtain money for activities only peripherally associated with the cadre's activities.

Obtain Budget and Released Time

One reason the cadre needs a budget and its clients need to be released from their regular duties to participate in training is Postulate 4: the satisfaction of existence needs usually distracts people from seeking satisfaction of the "higher" needs. In Kent, the cadre received excellent support from the superintendent who negotiated the original contract with CASEA. When he was replaced, however, the new superintendent began to use the cadre almost exclusively to help him communicate in meetings with staff and community. Apparently, he did not understand the wider functions of the cadre and has gradually cut the budget of the cadre until in 1974-75, the cadre has nothing except moneys the cadre's clients in the district may obtain from the district's administration to buy released time for themselves and for the necessary subteam from the cadre. This treatment, which feels like punishment to many of the cadre, has caused some to leave in discouragement and others to look outside the district for sources of support for OD work. The remaining cadre members continue active, however, and are again being asked by schools to render consultation to them.

Another reason a budget is important was mentioned before: it legitimizes the cadre and makes it easier for clients to communicate with it. In the case of Kent, however, the cadre seems to have built up enough good will to have overcome the disadvantage of not having a budget. Despite the fact of having no budget in 1974-76, it reports that it has had more requests from schools this year for organizational training than it has had since its first year of work.

We found that the subsystem of specialists could operate well in Kent, a district of about 600 staff, when financially supported annually by one-half the coordinator's salary, one-tenth to one-fifth of most other specialists' salaries, and a few thousand dollars per year for releasing occasional hours of the personnel with whom the specialists are working.

Demonstrate

One way the Kent cadre became known was through conversations with its members -- who were most of the time scattered throughout the district. But conversations never provide enough opportunity for the news to get around. Many members of the district had become aware of work of the OD sort from having participated in training led by CASEA and that experience helped knowledge about the cadre to spread, too. It was also true, however, that the experience with CASEA sometimes had its disadvantages. Sometimes participants disliked us and some failed to realize that the cadre were members of their own district, not new members of the CASEA team. Also, the cadre has used flyers to increase awareness of its activities.*

A better method than any of the above to increase awareness is the demonstration. This is not a training event, but a sort of exhibition of the kinds of activities OD training entails and an explanation of what gains are sought. Kent has used demonstrations more often in recent years.

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*The Kent flyer was a flip-up folder too complicated to reproduce in this book. A copy of the Eugene flyer appears as Appendix 4-F.

An effective variant on the demonstration that the Kent cadre used from the very first is the in-service course in communication skills described in Chapter 2.

Deal in Process, Not Content

The Kent specialists have always been careful not to give advice about content problems. They do not pose as experts in things like curriculum, finance, or teaching methods. Instead, they offer a great range of group and organizational processes to help members of the district in working on their own important problems. The specialist offers methods of working toward answers; not the answers themselves. As long as the specialists restrict themselves to offering process and method, clients need never feel that their own expertness is being challenged.

Wait for Clients

One of the mistakes we made in Kent during training was to urge the cadre members to find likely sites for interventions. Since these first projects did not arise at the initiative of the clients, people at some sites felt the OD work was being imposed upon them. In the case of one school, more than a year was to go by before the Kent cadre was welcome there again. Now, the Kent specialists wait for the school or department to demonstrate readiness to make use of aid before they offer to help. Even when called on, the specialists sometimes make doubly sure of the client's readiness by working out tentative stages of mutual commitment to the project. Specialists don't intrude upon the work of groups without invitation or try to convince groups that they need help when they don't want it. In addition to the fact that coercion would be contradictory to the values of collaboration and participation, there is little chance that clients will profit much if they have not committed themselves to expend the time and energy to undergo training.

Neither in Kent nor in Eugene did the cadre have to wait long for requests to come in. Two factors were probably at work. First, awareness was heightened by flyers, some demonstrations, and by conversations with the widespread members of the cadre. Second, unlike most services that can be precisely located and "walled off" by those suspicious of them, the cadre had no obvious location and therefore belonged to no obvious "camp." Almost everyone in the district had a colleague in the cadre.

Take Subsystems as Targets of Training

Despite considerable pressure, the Kent cadre has been impressively successful in observing our stricture to conduct organizational training only with subsystems -- highly interdependent groups with a common task. These groups have usually been schools, parts of schools, or parts of the central office. More detail will be given in Chapter 12. There is no stricture we think more vital.

It is true that the Kent cadre has often engaged in work other than *training*, such as the in-service courses in communication, either at its own initiative or at the demand of others. These courses are for individuals not subsystems and the cadre does not try to change organizational functioning through them. They are used as demonstrations, not as training. The facilitation at meetings with community groups that the new superintendent demanded of the cadre is also an example of this kind of work. It is a duty akin to that of chairperson, master of ceremonies, or parliamentarian, though requiring a different set of skills from any of these. It is clearly not training and does not improve the organizational functioning of the district in any basic way.

These peripheral duties are not unimportant. Sometimes, for example, a meeting is a crucial one and needs all the facilitation it can get. But our own hope was that the Kent cadre would engage in training subsystems more than anything else, and gradually increase the first-level and second-level skills of subsystems throughout the district. The greater the skill in subsystems (and eventually the district as a whole), the less "firefighting" should be required of the cadre, the administrators, and others. We are happy to note that after a hiatus in 1972 and 1973, the cadre is returning to training with schools.

We emphasized the point about training subsystems in Chapter 3, but perhaps it will do no harm to give it a few more sentences here. Traditional thinking about change in education has long focused rather myopically on the individual. In-service and college courses, journals, books, the ERIC system -- all these transmit information to the individual. The individual educator is asked to use the information, somehow, in his or her work, quite without regard to whether colleagues have or want the same information, or want to make a change, or could if they wanted to do so. Our theory calls for acting quite in reverse order. If members of a subsystem find that they share similar yearnings, that they can count on one another more than they previously thought possible, and that they can influence their own destiny more than they had imagined they could, they will quickly find ways of learning anything they as individuals need to know. But the converse is unlikely.

Collaborate with the Client

Very early in their history, the Kent consultants worked out their own rules for "contracting" with a school or other subsystem in the district. First, the coordinator presented the client (or the client's representative) with a list of organizational specialists the coordinator and steering committee believed to be competent to do the work proposed. The client then selected from that list a group believed to be welcome to all of the client group. After that was settled, the chosen specialists and the client (or representative) then worked out together the main outline of the intervention, and the plan was made known to all participants before training began. These three steps quickly became standard.

Most organizational specialists come to value empirical inquiry and humanistic relationships with others. It follows for specialists to act as a model, in their interaction with clients, of interdependence, collaboration, openness, and the use of rational, empirical inquiry as bases for organizing and getting work accomplished.

Also specialists must remain open to feedback about their own performance and helpfulness -- or lack of it.

Work over an Extended Period

Much research has shown that a one-shot intervention of two days, a week, or even two weeks, does not have much staying power in effecting organizational change. A growing body of research, however, is bolstering the conclusion that eighty hours or more, if spread over most of a school year, can have worthwhile effects -- see, for example, Schmuck and Runkel (1970), Murray (1973), and M. A. Smith (1972).*

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*The accounts of Murray and Smith have been condensed in Schmuck, Murray, Schwartz, Smith, and Runkel (1975).

The cadre members were aware from the first of the virtues of working over an extended period with a client. However, they have succeeded in doing so only rarely. The school that received the most training from them through spring of 1972 received only 46 hours of training. We shall see in the next chapter and others that 46 hours of training did have useful effects, but probably only because of some other special circumstances to be described later. It is likely that the Kent cadre would have conducted longer projects if more money had been available to release their own and clients' time.

Maintain Self-Renewal

Every cadre of organizational specialists that practices what it preaches must see to its own maintenance and self-renewal. The specialists should establish training and selection procedures by which to replenish their own ranks. They should employ procedures to maintain strength in their own group dynamics. And they should maintain liaison with outside agencies and consultants from whom they can learn more about organizational development and upon whom they can call for special help.

As we shall see in Chapter 12, the Kent cadre managed its own maintenance, replacement, and renewal with remarkable tenacity and success. Suffice it to say here that they could not still be in existence had they not done so.

Initial Obstacles to Progress

We have already mentioned two stumbling-blocks that we discovered, to our dismay, that we had thrown under the feet of the Kent cadre. The first was to put them in the role of salespersons instead of consultants. The second was that our presence in the district caused them to be viewed as a subsystem of CASEA rather than a local subsystem. But the cadre overcame these obstacles,and there was certainly no vestige of them left by the year after our departure.

There were other events that made life more difficult for the cadre members than they deserved. One thing was the fear, never completely absent during our presence in Kent, that we were purveying sensitivity training. This suspicion was probably not much allayed by our refusal to answer the demand for sensitivity training from a small group at the Pupil Personnel Department's training events in September, 1968. The misapprehension was probably strengthened by the principals' attendance at the Human Relation Laboratory in June 1968. That event consisted mostly of experience in T-groups, with personal growth rather than OD as the goal. Some Kent principals communicated the belief to teachers that the training done by the CASEA consultants and Kent specialists would be similar to their T-group experience. The misapprehension was probably also maintained by the fact that one school from which several specialists came (K 32) had actually received sensitivity training, and some people may have associated specialists with the sensitivity training given this school. The CASEA consultants should have devoted more time to demonstrating the nature of the projected OD training to interested teachers in the district.

Another of the Kent cadre's problems was a sheer overload of work. Part of the overload came because the ten percent released time promised by the superintendent who made the contract with CASEA was not always honored by the principals or other middle managers who supervised the regular work of the cadre members. But another part came simply because the work of the organizational consultant is demanding during an intervention, while planning for it, and in debriefing it -- and also while conducting the self-renewing activities necessary to maintain the capacity for everything else. There simply was not enough understanding in enough places in the district to make it reasonable to propose compensating the cadre members for all the time they spent outside actual intervention hours. In the end, being a cadre member became a labor of love.

Still another burden of the cadre member - - though not one from which we believe we could have saved the Kent cadre or any other -- is that of role conflict. Inevitably, cadre members will have to make decisions about whether to use or to disclose to other specialists diagnostic data obtained during training that could be used in making evaluations not related to the role of specialist. Or cadre members may wish to retreat from certain confrontations if they think their own status in the district could be threatened. Or they may find themselves torn between spending the next hour preparing for class or preparing for an intervention with the cadre. Or they may wonder whether their work as a cadre member or their work as counselor or principal is the more likely to bring them a raise in salary. And so on. This is one of the hazards of the work and one of the reasons high ego strength can be an asset to a cadre member, even though it may be a liability during initial work with clients.

Values for a Cadre

Most people who work in the field of organizational development share certain values that are not necessarily widespread among other sorts of people who work with managers, and not necessarily widespread among clients in schools -- at least at the start of a project. Values, of course, are expressions of ultimate yearnings (insofar as we can be aware of them), and are not to be argued. We present here our own values in the hope that those developing a cadre will find them felicitous. We borrow the words of Schmuck and Runkel (1972, pp. 184-187):

Striving to create

Building a new phenomenon is deeply gratifying to us. It is a joy to produce a set of events that did not exist before, quite aside from what it does or what it leads to. Joining with others in the joy of this creativity is even better. It is a good thing, not needing any other justification, to stand with fellow workers and gaze upon our handiwork. Comfort and pleasantness are not to be bought at all costs; creating events is sometimes hard and painful.

Since we value striving to create, we want organizations to state goals explicitly and pursue them flexibly and vigorously. We find that humans are very adaptable; almost everyone can contribute a valuable part to a goal that most others in a group want to pursue and almost everyone can find gratification in doing so. But people are not infinitely adaptable; in a group of twenty or thirty, there is often one who is overstressed by the changes OD brings. Sometimes the group cannot help this person to adapt without taking an exhorbitant amount of time from the organization's tasks. In such a case, the best course of action is to seek a place for the unconverted person in some other school or district. Always, the morphogenesis of the organization is a resolution of some sort of conflicts ~~among~~ between individual needs and environmental demands.

Valuing striving toward explicit goals means that conflict and pain in the organization must be made known and treated as materials from which achievement is built. When an individual suffers for the sake of the group goal and he hides his suffering, others can remain unaware of his sacrifice and he can come to feel that others are profiting unduly at his expense. If his suffering is openly admitted, others can be grateful for the gift he has made to the group goal and can reward him with their appreciation. At later stages of the work, any necessary sacrifices can be equitably redistributed.

Joining with others

When there is disagreement about what to build or how to build it, one way to eliminate disagreement is to get rid of the people who disagree with oneself. This is like the conqueror who believes that he can win only if others lose. This is not the kind of achievement or creativity we value. We value the condition of joining with others to overcome obstacles. We enjoy, needing no justification for it, fitting our own well-articulated contribution into the contributions of the rest of the team. It is even better when it is very clear that everyone else is feeling the same kind of gratification.

Since we value joining with others, we must seek to draw out the abilities, knowledge, and other resources of every individual so that all can be welcomed and valued. If one person contributes a disproportionately large share of resources, he can come to be valued because he can be exploited; others will come to feel that they cannot repay the one person's contributions, and they will develop rationales for accepting more than they give. The person with the extra resources will find himself "buying" pleasant relations between himself and others. We can freely join a group and be accepted only to the extent that all the others can freely join and be accepted. And this can occur only if everyone has something valuable to offer the group. In our experience, almost everyone does have something valuable to offer almost every group.

Similarly, we value ways of solving problems that maximize the gains of the maximum number of people and minimize the losses of a maximum number. And to do this, an organization must anticipate changes in the environment and initiate alterations before the demands from the environment produce strong stresses and polarize the members of the organization about responsive policy. If almost everyone is continuously or recurrently involved in adaptive problem-solving, then each person can be committed, at almost every moment, to action that moves him toward his own goals while at the same time moving the organization toward its goals. As long as this condition can continue, people will not need to choose up sides and try to win at the expense of the other side.

Just as valuing striving means that people must become aware of pain in the working group, whether their own pain or that of others, so valuing joining means that people must become aware of joy in the group, whether their own or others'. We cannot take joy in sharing the work of the group unless the others recognize the possibility, recognize our own state through their own empathy, and hold the moment for us while we express our gladness.

Delighting in work

Work, we believe, is as human as play. Quite aside from what else work achieves—such as a knowledge of arithmetic, a plan for a basketball tournament, or the commitment of an employer to provide job experience for high school students—work can also achieve the satisfaction of individual human needs. While we grant that work must some times get done for the welfare of the group or society even though it is painful or even damaging to some of the individuals involved, we nevertheless value most the kind of work and the kind of organization that enable the most individuals to find most of their duties personally rewarding. In brief, work can be beautiful for many people much of the time, and that's the way we prefer it.

Since we value delighting in one's work, it is necessary that we know whether others are finding pleasure in their work. We cannot all enjoy every moment of our work. Sometimes one or another of us must undergo drudgery or even pain for the larger job to get done. If one person is not to get more than his share of unpleasantness, it is necessary for the pleasure and pain each person is finding in his work to be widely known in the group. Only by bringing feelings about the job into the open can an equitable sharing of pleasure and pain be assured.

In brief,

we value the *delight of joining and working with others to strive toward creating new, more adaptable human processes.* no italics

Summary

In this chapter, we have defined the cadre's functions, listed the phases in the formation of a cadre, and stated the rules the cadre uses in its functioning. The function, formation, and rules of the cadre are based on the postulates stated in Chapter 3.

Functions of a Cadre in a School District

The cadre:

1. provides training to improve communication.
2. teaches problem solving.
3. teaches goal assessment.
4. helps involve all levels in decision making.
5. provides a source of fresh ideas on organizational procedures and structures.
6. helps convert innovative ideas into reality.

Phases in the Formation of a Cadre

The District must:

1. exhibit clear and shared goals concerning the cadre.
2. provide financial support for the cadre.
3. make key people aware of the cadre's presence and functions.
4. exhibit readiness for change.
5. hold demonstrations as necessary to promote understanding of the cadre and its functions.
6. select the means to train the cadre.
7. find a co-ordinator.

8. recruit cadre members.
9. train the cadre.

Rules for the Cadre

The cadre will be more successful if it:

1. draws specialists part-time from all ranks.
2. does not allow specialists to consult in their own subsystems.
3. is itself a visible and differentiated subsystem.
4. obtains a budget and released time.
5. holds demonstrations of training and the skills it teaches.
6. deals in process, not content.
7. waits for clients and does not push its services on others.
8. takes subsystems as targets for training.
9. collaborates with clients before training.
10. works over an extended period.

We have also stated in this chapter, for cadres that might find it helpful, the things we value as organizational developers: striving to create, joining with others, and delighting in work.

Chapter 5

FACE TO FACE: EFFECTS OF ORGANIZATION TRAINING ON INTERPERSONAL SKILLS

by Runkel and Bell

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Chapter 5

FACE TO FACE:
EFFECTS OF ORGANIZATION TRAINING ON INTERPERSONAL SKILLS

Runkel and Bell

(final)

We turn now to evidence. The previous chapters of this book have dealt with the history of and theory behind the Kent project. This chapter begins a section of the book dealing with the data generated by the project and the conclusions to which the data led. The central question in this section is: did the training and consultation supplied by CASEA and the Kent cadre of organizational specialists have useful effects? In this chapter and in later ones, we shall compare the evidence of differences in certain skills among trained and untrained schools and other groups. At the same time, we shall show how certain conditions within schools enhance or diminish the effects of training.

Before plunging into the substance of this chapter, we shall first present a brief overview of the sorts of questions with which the data of the next eight chapters will deal. In the present chapter, we shall discover certain conditions under which interpersonal responsiveness among teachers is more likely. In Chapter 6, we shall look at communication in schools with collaborative teaching structures such as "open concept" or team teaching. In Chapter 7, we shall see that training produced evidence of constructive adaptation in schools only when certain preconditions existed.

In Chapters 5, 6, and 7, we give our attention to interpersonal skills -- the sort of interpersonal communication and coordination we called "first-level" skills in Chapter 3. Discussion of second-level skills will occur in Chapters 8 and 9. Chapters 10, 11, and 12 will deal with findings concerning third-level skills.

The present chapter will deal, first, with the beliefs the Kent district's key line personnel held after training concerning how much they and their colleagues were using the new communication skills we had introduced. Second, the chapter will present evidence on changes in the communication between teachers and students in school K23, a junior high school. After that, we shall devote our attention to interpersonal skills among staff in elementary schools.*

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* We give short shrift in this book to outcomes in secondary schools. One reason is that training was conducted only in two junior high schools and two senior high schools, and these are so few schools in each level that trying to draw conclusions about what went on in these schools would pull us into endless speculation. The second reason is that the amounts of training and consultation in those schools were small in comparison to the sizes of the schools and the magnitude of the task. We and the cadre did achieve a few salutary effects, but we believe those small outcomes are best left to the narrative in Chapters 2 and 4.

We now begin by examining the effects of our first training event on the key district personnel who attended.

First-Level Effects on Key Line Personnel*

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* This section follows Porter and Schmuck (1973).

Our first training event in Kent occurred in April of 1968. We described it in Chapter 2 in the section on "Training for Administrative Groups -- First Event: Key Line Personnel." We had three goals for the event: (1) to establish widespread understanding of our project and favorable attitudes toward organizational development; (2) to identify intergroup problems, especially across hierarchical levels, that might justify subsequent communication-skill training and problem solving; and (3) to establish new norms for collaboration among the various participating role groups. Many of the persons who attended this first event became active supporters of the Kent project during the ensuing months and years, and some even became members of the Kent cadre of organizational specialists.

The primary theme of the first event was that of uncovering organizational conflicts in a confrontive yet constructive way. The group spent a great deal of time discussing communication problems. They attempted to tell each other ways in which they were helpful or not helpful, and they exchanged perceptions of organizational problems.

What effect did this event have on the beliefs participants had about their interaction with others during their usual work day? We might expect several possible effects. Perhaps participants in the 1968 event believed that after the event, there was more open communication from others in their schools or departments. Perhaps they actually became more willing to describe their emotions during discussions and more ready to invite others to do the same. Perhaps the event of April 1968 predisposed its participants to respond more fully to the consultation or training they later experienced with us or with the cadre. Any of these effects is possible, but none may have occurred. Our question is whether the Kent people who attended the five-day event later exhibited intentions and beliefs that were any different from those of any other similar collection of persons who have never received training. Evidence on this question can be useful to school people or consultants contemplating a project in organizational development. The answer can indicate what sorts of outcomes should reasonably be sought and expected during the first meetings and demonstrations in such a project.

Catherine Porter (1972) selected certain questionnaire items to examine the first-level attitudes of participants in the April 1968 event toward several aspects of their interaction with others. Then she sought a comparison group of persons from Auburn and Federal Way, where no groups or subsystems, to our knowledge, had received any consultation, demonstration, or training in skills of the sort we are examining here. To pair with each person who had attended the April 1968 event in Kent, Porter found a person in Auburn or Federal Way who was in the same sort of position, with duties as similar to those of the Kent person as could be found. She then examined the questionnaire responses of the Kent group in 1968 (before the training event) and of both groups in 1970. The two-year span gives a good test of the durability of effects. We hope that the use of the comparison group from the other districts helps provide a check on whether the effects on the Kent group could have arisen from experiences of the individuals between the two assessments other than the 1968 event.

Of course, there was some attrition; some people left the district between the two questionnaire administrations, and some failed to answer the questionanire at the one time or the other. Porter's final data were taken from 43 persons in the Kent group and 41 in the comparison group.

We present here Porter's chief findings. The first questionnaire item* read:

Item 1. Suppose Teacher X feels hurt and "put down" by something another teacher has said to him. In Teacher X's place, would most of the teachers you know in your school be likely to tell the other teacher that they felt hurt and put down?

( ) Yes, I think most would.
( ) Maybe about half would.
( ) No; most would not.
( ) I don't know.

This item was not given to central office personnel. The percentages of responses of the 32 teachers and principals who were given the item are shown in Table 5-1 below.

Table 5-1. Percentages of key teachers and principals in Kent giving indicated responses to item 1 in 1968 and 1970

	Percentages of the 32 respondents in:	
Response	1968	1970
"Yes, I think most would" or "Maybe about half would."	31	59
"No, most would not" or "I don't know."	69	41
Total percentages	100	100

Note: Difference between years is statistically significant with $p < .05$. Details of the calculation are given by Porter (1972).

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* We adapted the four test items used in this section from items kindly supplied to us by Ray Jongeward and Michael Giammetteo of the Northwest Regional Educational Laboratory in Portland, Oregon.

Item 1 gives respondents the opportunity to indicate whether they believe that others around them accept emotions that arise during the work day as legitimate matters for discussion. This acceptance is one of the skills that we try to transmit during our first-level training. Among the four alternative answers offered by the item, we judge the first two to be more "favorable" to organizational improvement than the last two. Table 5-1 tells us that only 31 percent of the 32 key teachers and principals gave favorable answers to this item before the event of April 1968, but that the percentage rose to 59 percent two years after the event. By 1970, in other words, almost twice as many of these teachers and principals believed that others in the school would say so when they felt hurt or put down by a colleague.

This is an astonishing rise. It would have been more common to find little difference over the two-year span. We shall see in data to be presented later that percentages giving favorable responses to questions like this often showed significant increases just after training or consultation, but then fell back toward their original level in the following year. When a percentage stays high for a second year, it is remarkable.

But was there a general trend in this direction in other districts in Kent's region? Let us look to see whether a similar proportion of persons in similar positions in the other two districts was giving favorable answers by 1970.* Table 5-2 shows the percentages in

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* Two questions may arise concerning the meaning of responses. Did those responding favorably come from schools that received extensive OD training after the initial training event? And, did respondents reflect the norms of their home system rather than the effects of this training event? We are unable to obtain valid answers to these questions, however, because there were so few schools trained in Kent that the number of cases in the categories we need to examine are too small to give us useful results.

Kent and the other districts in 1970.

Table 5-2. **Percentages of key teachers and principals in Kent and other districts giving indicated responses to item 1 in 1970**

	Percentages of respondents in:	
Response	**Kent**	**Other districts**
"Yes, I think most would" or "Maybe about half would."	59	27
"No, most would not" or "I don't know."	41	73
Total percentages	100	100
Total numbers	32	30

Difference between groups is statistically significant at $p < .01$. See Porter (1972) for calculation.

In Table 5-2, we see that the percentage of favorable answers in the other districts in 1970 was about the same as that in Kent in 1968. Presumably, the increase in the number of those in Kent who expected open communication from their colleagues was due to something that happened in Kent but not in the other districts. It seems likely that an important part of the experience of the Kent group was their participation in the training and consultation for organizational change in April 1968 and later.

What should we conclude about what was going on around these teachers and principals that led them to give the answers they gave in 1970? Perhaps their answers were sheer wishful thinking. Perhaps the influence of the cadre of organizational specialists had become strong enough by April 1970 that a norm had developed for describing feelings promptly. Perhaps these respondents happened to be in schools that had received substantial later training. Perhaps respondents became more open in their communication with others causing colleagues to feel at ease telling them about their feelings; yet perhaps colleagues did not tell anyone else about their feelings, and therefore respondents actually overestimated the amount of overall open communication in their school. It is difficult to interpret a single item, even when the differences are as strong as they are in Tables 5-1 and 5-2. Let us postpone further interpretations until we have looked at a few more items.

Questionnaire item 2 also deals with emotion-tinged communication:

Item 2. Suppose you are in a committee meeting with Teacher X and the other members begin to describe their personal feelings about what goes on in the school; Teacher X listens to them and tells them his own feelings. How would you feel toward X?

( ) I would approve strongly.
( ) I would approve mildly or some.
( ) I wouldn't care one way or the other.
( ) I would disapprove mildly or some.
( ) I would disapprove strongly.

The view consistent with the training we gave is that approving of expressing one's feelings is the "favorable" answer. The Kent people changed on this item also. Item 2 was administered to all

43 of Porter's sample. Table 5-3 shows the percentages of responses in 1968 and 1970.

Table 5-3. Percentages of key line personnel in Kent giving indicated responses to item 2 in 1968 and 1970

Response	Percentages of the 43 respondents in: 1968	1970
Approve strongly, mildly or some	26	54
Disapprove strongly, mildly or some; or wouldn't care	74	46
Total percentages	100	100

Differences between years is statistically significant at $p < .01$. See Porter (1972) for calculation.

About twice as many key personnel in Kent responded favorably to both items 1 and 2 in 1970 as in 1968. In the case of item 2, however, the proportion of favorable answers in the other districts in 1970 was about the same as the proportion in Kent. We do not know whether the other districts increased their percentages as did Kent or whether the percentages in the other districts were about the same in 1968 as they were in 1970. But the fact remains that the percentage in Kent doubled during the two-year period.

Like the first two items, item 3 also contains an emotional component:

Item 3. Suppose Teacher X were present when two others got into a hot argument about how the school is run. And suppose Teacher X tried to get them to quiet down and stop arguing. How would you feel about the behavior of Teacher X?

( ) I would approve strongly.
( ) I would approve mildly or some.
( ) I wouldn't care one way or the other.
( ) I would disapprove mildly or some.
( ) I would disapprove strongly.

In this case the favorable response is on the disapproving side, that is, disapproving of someone who tried to quiet an argument. The implication here is not that "a hot argument" is necessarily a beneficial thing. The item was based on the belief that the best response to an argument is not to suppress it, but to turn it into a constructive discussion by helping people really listen to each other and by clarifying issues.

In 1968, the percentage giving favorable answers to this item was 29; in 1970 it was 39. The difference, though in the favorable direction, is not statistically significant. It turned out, however, that Kent did differ significantly from the other districts:

Table 5-4. Percentages of key line personnel in Kent and other districts giving indicated responses to item 3 in 1970

	Percentages of respondents in:	
Response	Kent	Other districts
Disapprove strongly, mildly or some; or wouldn't care	41	36
Approve strongly, mildly or some	59	64
Total percentages	100	100
Total numbers	39	39

Difference between groups is statistically significant at $p < .05$. See Porter (1972) for calculation.

The percentage differences in Table 5-4 are not large, but they are demonstrably larger than would reasonably occur by chance. A larger proportion of people in Kent than in other districts disapproved of efforts to quash an argument. The total evidence from Item 3 concerning effects of training on these key persons is favorable, though not strong.

Item 4 administered only to teachers and principals, dealt with continued confrontation when a disagreement arises:

Item 4. Suppose Teacher X strongly disagrees with something B says at a staff meeting. In Teacher X's place, would most of the teachers you know in your school seek out B to discuss the disagreements?

( ) Yes, I think most would do this.
( ) Maybe about half would do this.
( ) No; most would not.
( ) I don't know.

The percentage of the Kent group giving favorable answers on this item rose from 69 percent in 1968 to 78 percent in 1970; however, this increase was not greatly different from the chance expectation. The difference of the Kent group from similar persons in the other districts was stronger, though the chance probability went only to .10. Table 5-5 suggests the possibility that the key Kent personnel, compared to key personnel in other districts, were more likely to expect their colleagues to work out disagreements with others than to shy away from them.* This evidence from item 4 is favorable but weak.

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* Porter examined four other items. Three of these turned out to have such high rates of favorable response in her two groups that reliable differences could not be ascertained. The fourth item did not reveal a significant difference; we omit it from this discussion because we were unable to interpret its content with any confidence.

Table 5-5. Percentages of key line personnel in Kent and other districts giving indicated responses to Item 4 in 1970

Response	Percentages of respondents in: Kent	Other districts
"Yes, I think most would" or "Maybe about half would."	78	57
"No, most would not" or "I don't know."	22	43
Total percentages	100	100
Total numbers	32	30

Statistical significance of the difference between groups is $p < .10$; see Porter (1972) for details

The desirability of confrontiveness in the face of conditions that usually discourage continued communication was a central theme of the demonstration-and-training event in April 1968. The imaging procedure that emphasized the uncovering of intergroup and interpersonal conflicts in a constructive (yet confrontive) fashion took most of the workshop time. Participants spent a large amount of time describing feelings of irritation, paraphrasing one another's feeling-statements, and directly confronting one another about their differences in educational values. We shall see later in this chapter and in others that a rise in willingness to communicate under conditions fraught with emotion, and to expect others to do so were some of the first effects we can expect from this sort of training.

The four items in Porter's study all deal with persevering in communicative situations discouraging to most of us. Items 1, 2, and 3 picture emotional situations that often cause participants to become anxious and withdraw from communication. Item 4 pictures a situation in which initiative is required from one person or the other if communication is to be continued. All these items typify skills needed at the first level; skills that can be exercised between one individual and another. If any questionnaire items are able to show the lasting effects of this training upon individuals, these items should be the ones. Later in this chapter, we shall see these items appear again as parts of "tests" of emotional communication and openness.

The data we presented above confirm our expectations, but the effects are not strong. Only item 1 showed both changes in Kent and a difference from other districts that were clearly beyond chance. The other three items all showed favorable results, but their contrasts with other districts were weaker.

After reflection however, it should not surprise us that the findings indicated by these four items were not dramatic.* We are looking here at the reactions of individuals who were not members of the same subsystem, and our training was never intended to have lasting effects on individuals. It was intended to have effects on schools and other subsystems, where new group norms would arise that would enable every individual to help every other individual continue to act according to the new agreements. Some of the people studied by Porter found that in

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* The findings displayed by item 1 truly deserve to be called dramatic both from a practical viewpoint and from a researcher's viewpoint. But we must temper our admiration for that result by the results of the other items, all of which were presumably as able as the first to detect similar sorts of readiness or behavior.

April 1970 their desire to be confrontive and to continue to communicate despite emotion was reciprocated by no one. It was difficult for them to continue being confrontive because there were no group norms to support that behavior. In brief, our theory causes us to predict that a study of effects of training on scattered individuals would show weaker effects than a study of effects on individuals who are all members of the same school or other subsystem. And we shall find this prediction borne out as we go along.

Communication between Teachers and Students

We turn now to a substudy concerning communicative behavior between teachers and students. We include this study in our story because it demonstrates that our sort of training can have useful effects in the classroom -- namely that some students and teachers in trained schools can become more fully interactive groups -- even when these effects are not consciously intended.

Most interaction between teachers and students in the classroom is between one teacher and one student. Even a teacher giving a lecture is usually talking as if to an individual rather than interacting with a group of diverse members. Very rarely does communication between teachers and students occur in a fully interactive group containing more than one teacher and more than one student. In most classrooms, even though there is always more than one student, the classroom does not act as a group in the sense that every member is relatively free to initiate communication with any other member. Yet, we believe, teaching and learnin within the classroom can be enhanced if the members of the classroom group acquire and practice first-level skills, just as other organizational processes in other subsystems can be enhanced. We are pleased that the data in this substudy so clearly support this belief.

Before the Kent project began, CASEA's program on Strategies of Organizational Change conducted a study (see Schmuck and Runkel, 1970) similar to the one in Kent to be described in this section. Nineteen teachers who had participated in a summer OD training program were asked, as part of an accredited college course, to describe any results of the training that they observed in their classrooms during the fall. They reported that they were applying techniques they had learned in training to improve the group processes in their classrooms. Their applications involved such procedures as engaging small groups of students in projects, using nonverbal exercises to depict feelings about the subject matter being studied, using paraphrasing to rectify poor classroom communications, and using small groups to encourage giving and receiving feedback about how the class was going.

A shortcoming of this study is that the reports were not freely given. Despite the fact that teachers were not required to make applications of the training to their own classes, the fact that they were required in a course to observe results of training could very well have caused more teachers to try applications in their classrooms than would have been the case among teachers not enrolled in the course. Furthermore, even though the teachers tried these new methods in their classes, we have no data on the ways students were affected. Nevertheless, this study at least suggested that OD training could have direct classroom results.

After the Kent project began, Ronald Bigelow, then of our staff, saw an opportunity within the project to test (1) whether teachers who underwent training for organizational development would transfer those techniques to their classrooms, and (2) whether the use of those techniques would have any effects on classroom climate. This section condenses Bigelow's (1969, 1971) reports of his study.

Bigelow's reasoning was that the interpersonal and group skills we taught to the teachers during training could -- if the teachers in turn conveyed some of the norms to their students -- bring about changes in the pattern of interaction between the teachers and their students. For example, increased openness in communication and increased skill in giving information about one's own behavior and feelings could lead both teacher and students toward behavior desired by both but not previously attainable. Skills in problem solving could help both teacher and student clarify classroom problems and to find solutions. All these processes could increase student participation in discussion and decision making.

We have mentioned before the importance of training subsystems rather than individuals and how difficult it is for an individual working alone to change the norms of interpersonal behavior in an untrained subsystem. Why then did Bigelow believe that a trained teacher could affect the norms in an untrained classroom? The reason is that a teacher is not just another member of the classroom subsystem. Teachers hold positions of great influence and power in the classroom. Because of their position, they are able to demonstrate and encourage new norms in the classroom and reward those who themselves demonstrate the new norms.

The Training in School K23

Bigelow studied the effects of organizational training in junior high school K23 and, for comparison, used school K21, a junior high school in which no organizaitonal training had occurred. We described some of the main features of CASEA's intervention in K23 in Chapter 2.

Verbal communication skills and a group-problem-solving sequence were introduced to the total staff of K23 during meetings held between mid-February and mid-March. These meetings were held during the school day and for one hour following it. The first day's groupings consisted of those teachers sharing common planning periods. These meetings were fifty minutes long, and were used to introduce and provide practice in verbal communication skills. In the meeting following the dismissal of school, the staff was asked to perform an exercise in one-way and two-way communication.

In the next four meetings, departmental groups worked through a five-stage problem-solving sequence. The first three of these four meetings were held during the school day. Teachers' classroom assignments were modified to free departmental members of classroom responsibilities during common periods. These periods were also fifty minutes in duration. Each day the staff came together again for one hour after dismissal of school. During these one-hour sessions, departmental groups were provided with opportunities to share their plans and to aid other groups in developing their plans.

The problem-solving sequence introduced to the staff consisted of the following five steps:

1. Definition of the problem.
2. Delineation of restraining and helping forces.
3. Selection of restraining forces to be confronted.
4. "Brainstorming" of potential ideas for the reduction of selected restraining forces and the selection of those ideas that seemed most promising.
5. Preparation of an action sequence and planning its tryout. (The tryout was done through role playing.)

These stages were introduced as the departmental groups progressed in the accomplishement of their tasks. Working in pairs, during the four meetings, members of the training team aided the groups in maintaining focus on the task and sustaining clear communication. Throughout the problem-solving exercise, communication skills were reinforced by the trainers. At no time did trainers initiate the possibility of applying these skills in the classroom. However, most groups did spontaneously discuss the potential of their classroom use.

The last meeting of the program was held in mid-March and was designed to be a culminating experience. This meeting was held on a Saturday and the total professional staff (forty-two members) were paid for their presence. The meeting lasted from 8:30 a.m. until 4:30 p.m., with lunch being served at the meeting site. During the morning, the departments described action plans and asked for comment and criticism from others. Most participants became very involved, and many remarked they valued the feedback they received.

The afternoon was used to begin working with the staff as a total group. Two departments presented topics for discussion to the total staff. Both departments' problems were seen as school-wide in scope and elicited a great deal of discussion. In each case, decisions for staff action were achieved. The final thirty minutes of the afternoon were spent discussing the outcomes of the project and the teachers' feelings about its productivity. Several departments requested that members of the training staff return at a later date to aid them in a follow-up of the progress being made, and the training staff agreed. Most staff members of the school expressed the opinion that the meetings had been productive but also expressed concern about whether or not the plans developed would be implemented. Several indicated that they felt that the continuation of the plans was their responsibility and that they "shouldn't need any crutches."

The total number of hours of training given at K23 by CASEA was only 21 hours, sometimes involving the whole staff and sometimes not, as described above. Further information about hours and types of training and other consultation are summarized in the section for K23 in Chapter 2 and Appendix 5-A.

Evaluation

Two instruments were used in Bigelow's study. Interaction analysis according to Flanders (1969) was used to determine any changes in classroom interaction patterns and teachers' verbal behavior. The second instrument was a survey of students' perceptions called "Classroom Life," developed by Schmuck (1968) to determine students' attitudes toward the class in general, the teacher, and the other students in the class. Both instruments were administered before and after the training for organizational development (OD), both in the trained school and in the comparison school.

Bigelow randomly selected 14 teachers in each school (about one-third of the staff in each case) to be studied. Tape recorders were placed in the rooms of the 28 teachers, and the teachers activated them for six 20-minute recording sessions at designated times before the OD training in early December and for six similar sessions in late March after the last of the training. The recordings were then brought back to our office and coded by trained coders according to Flanders' method of interaction analysis. The identity of the schools and teachers was hidden from the coders. Thirteen teachers in each school returned completely usable tapes, and the analysis is based on those 26 teachers.

Flanders' method uses the ten categories of statements shown in Table 5-6 (see page 21). Every three seconds, the coder tallies the kind of statement that is being made.

Results of the Interaction Analysis

The first four categories in Table 5-6 (the "Indirect Influence" box) are of types of statements that tend to draw students into interaction. Statements of categories 5, 6, and 7 tend to establish domination by the teacher. An "I/D ratio" can be calculated by dividing the number of tallies of integrative statements (categories 1 through 4) by the number of tallies of dominating statements (categories 5, 6, and 7). Caculating these ratios for the trained and the untrained teachers yielded impressive results. We see in Table 5-7 that the two groups began with mean ratios indistinguishable to two decimal places. The mean of the untrained group did not change at all from December to March, but the trained group showed a mean change of .11. The strong difference between

Table 5-6. Categories for Flanders' Interaction Analysis (from Bigelow, 1971)

TEACHER TALK	INDIRECT INFLUENCE	1. ACCEPTS FEELING: accepts and clarifies feelings of the students in a nonthreatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included.
		2. PRAISES OR ENCOURAGES: praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual; nodding head or saying, "um hm?" or "go on" are included.
		3. ACCEPTS OR USES IDEAS OF STUDENT: clarifying, building, or developing ideas suggested by student. As teacher brings more of his own ideas into play, shifts to category five.
		4. ASKS QUESTIONS: asking question about content or procedure with intent that student answer.
	DIRECT INFLUENCE	5. LECTURING: giving facts or opinions about content or procedure; expressing his own ideas; asking rhetorical questions.
		6. GIVING DIRECTIONS: directions, commands, or orders to which student is expected to comply.
		7. CRITICIZING OR JUSTIFYING AUTHORITY: statements intended to change student behavior from nonacceptable to acceptable pattern; bawling someone out; stating why teacher is doing what he is doing; extreme self-reference.
STUDENT TALK		8. RESPONSE: student makes a predictable response to teacher. Teacher initiates the contact or solicits student statement and sets limits to what student says.
		9. INITIATION: talk by students which they initiate. Unpredictable statements in response to teacher. Shift from 8 to 9 as student introduces own ideas.
		10. SILENCE OR CONFUSION: pauses, short periods of silence and periods of confusion in which communication cannot be understood by observer.

Table 5-7. Means and ranges of Integrative/Dominative ratios among teachers in a trained and an untrained junior high school

Group of teachers	Mean before training	Mean change	Range of changes
Trained	.45	.11	+.08 to +.13
Untrained	.45	.00	-.02 to +.02

the two groups is especially clear when we look at the ranges of the changes on the part of the teachers. The untrained teacher who changed the most in the favorable direction changed +.02, while the trained teacher who changed the least changed +.08 -- actually leaving a gap between the change scores of the trained and untrained teachers! In fact, the gap between the groups in amount of change was greater than the entire range of changes within either group! Obviously the statistical significance of these findings is strong.

We can also see effects of the OD training by looking at increases and decreases in the tallies the coders made for each of the ten interaction categories. Table 5-8 contains the increases and decreases

Table 5-8. Increases (positive) and decreases (negative) in frequencies of statements on Flanders' interaction categories among teachers in a trained and an untrained junior high school

Flanders' categories	Trained teachers	Untrained teachers
Integrative:		
1. Accepts feeling	NS*	NS
2. Praises	138	NS
3. Accepts ideas	280	NS
4. Asks questions	240	170
Dominative:		
5. Lectures	NS	NS
6. Gives directions	-414	81
7. Criticizes	-195	63
8. Student response	179	219
9. Student initiation	188	NS
10. Silence or confusion	NS	146

* Changes in frequencies of tallies are given in numerals where the changes are large enough to be statistically significant at .05 or beyond. In the remaining cases, the entry is "NS." See Bigelow (1971) for details.

in the frequencies of tallies after training. It can be seen that in every one of the integrative categories where at least one of the changes was statistically significant, the trained teachers increased their frequencies more than the untrained teachers. Next, in both dominative categories with significant changes, the trained teachers decreased their frequencies while the untrained teachers increased theirs! In none of these seven categories did the untrained teachers change as favorably as the trained teachers. Category 8, student responses, contains student utterances that have been solicited by the teacher. We made no predictions about whether training would affect that category. If there weren't much student recitation going on in the classroom at the time of the pretest, frequencies in that category might go up as both solicited and unsolicited communication from students increased. Or, if a great deal of student recitation had been going on at the time of the pretest, then frequencies in this category might go down as time that was once used for recitation became used instead for student-initiated comments. In fact, student response increased more in the classes of the untrained teachers.

Category 9 contains student-initiated utterances. We predicted that training would cause teachers to establish norms which would enable students to feel free to actually initiate communication. In fact, student-initiated talk did increase more in the classes of the trained teachers. All these results are. on the whole, the effects that Bigelow predicted to follow OD training.

Comparisons with Other Sorts of Training

In 1973, Snyder and Runkel searched for other empirical studies in which, as in Bigelow's, (1) teachers were given training, (2) one hypothesis was that the training would produce increased communication initiatives on the part of students, and (3) the measurement of the results of the training used Flanders' scheme or something very similar. They found eleven other studies satisfying these requirements. Five of the other studies strongly supported the hypothesis that training teachers would result in certain changes in the behavior of the teachers' students, as did Bigelow's. Two of the studies showed effects opposite to prediction. Four studies were ambiguous in their results. Our reaction to this "box score" is not to bewail the studies that failed to support the hypothesis, but rather to marvel at the effectiveness of training that actually showed the intended second-step effects in six cases out of twelve* -- that is, effects were demonstrated not merely on the teachers themselves who received the training, but on those teachers' students, who received no training! We think the evidence argues that this field, that of interaction analysis, is a promising one in which to look for a practical technology, especially in view of the fact that significant results were obtained in some studies after as little as 20 or even nine hours of training.

Bigelow's study was unique in directing the training to communication and problem solving between teachers, giving no direct training to teachers in analyzing the behavior of students or in responding to it. The active training always made use of actual problems existing within the faculty. The skills taught were not conceived or presented, however, as peculiar to interaction among teachers. The thrust of the training was toward seeking to understand the work goals of other human beings and toward entering into joint problem solving with them.

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* The reader should resist the temptation to take six favorable experiments out of twelve to be sheer chance. The magnitude of the outcomes in the six favorable studies was far beyond what could be expected in 50 percent of the trials. It was, of course, beyond what could be expected in five percent of the trials. To use Bigelow's study as an example, note in Table 5-7 that the ups and downs that occurred without any influence of training were very small compared to the magnitudes of change produced by the training.

The fact that Bigelow's study was one of those receiving strong support for its predictions suggests that the most effective shaping of relationships between teachers and students may not come so much from traditional pedagogy or from "discipline" as from the more general norms for cooperative work between humans, whatever their special roles at the time. It may turn out that the best strategy for improving the various interactive relationships in the school, including the teacher-student relationship, is not to design specific retraining programs to improve each one, but rather to design retraining in the skills of human interaction that underlie all relationships.

Regarding the cost of retraining, it is worth noting that, among the six studies that successfully altered the initiatives of students, the greatest number of hours spent in teacher training was 70 (by Rao and Mehta, 1972) and the smallest was nine (by Kirk and Amidon, 1967) -- the teachers studied by Bigelow spent 21 hours.

Results Concerning Classroom Climate

The second instrument used in this research, the Classroom Life questionnaire, was used to determine the effect of the changes in teachers' behavior in the classroom on the attitudes of students toward the teacher, the class, and other students. It turned out that between December and March changes in student attitudes toward their teachers and toward their classes were very similar in both the trained and the untrained school. Differences in changes of attitudes of students toward one another, however, did occur. Table 5-9 shows the outcome.

Table 5-9. Changes in responses of students of teachers in a trained and an untrained junior high school to certain questionnaire items indicating attitudes toward other students

Questionnaire item	Students in trained school	Students in untrained school
Pupils in this class help each other	NS*	down
Pupils in this class act friendly toward each other	up	down
Pupils in this class hang around together outside of school	up	NS

* Favorable and unfavorable changes are indicated by "up" and "down" where they were statistically significant at .05 or beyond. Where changes were not significant, the entry is "NS." See Bigelow (1971) for details.

The pattern shown for students' attitudes in the untrained school is typical. Several studies have shown declines in the favorability of students' expectations about school life as the school year wears on; among them are the studies by Gage, Runkel, and Chatterjee (1963) and by Flanders, Morrison, and Leland (1968). The pattern for the untrained school in Table 5-9 is one more example of such an attitudinal deterioration. The trend in the trained school K23, however, went contrary to the usual pattern. No one of the three items showed a significant deterioration; in fact, two of the items showed a significant increase in favorability.

Bigelow (1971) cited other research in classrooms supporting his argument that the behavior of the teacher, whether integrative or dominating, influences students to show either friendly, collaborative attitudes toward one another or separative and competitive attitudes. He also cited research showing that students in integrative classroom climates, compared to those in teacher-dominated climates, recalled more academic material, did more homework, showed higher achievement in cognitive, affective, and behavioral domains, and liked their classroom life more.

The work of Bigelow and the other researchers mentioned here and in Bigelow's (1971) own report amounts to a fairly respectable body of evidence that classrooms can become more attractive, rewarding, and productive places for teachers and students to work if interpersonal norms can move toward more open communication, more systematic joint problem solving, and an integrated style of working. These studies further suggest that the new norms can be produced to an important degree in the majority of cases (in the kinds of schools studied) by certain kinds of training. Training for OD and training in Flanders' categories are two possibly effective styles of training. Finally, compared to the number of hours an enrollee puts into a typical college course in pedagogy (perhaps 70 to 100) and its usual results, the in-service training described in this section (requiring nine to 70 hours) seems to us far more economical. We hope many workers in research and development will attempt retraining in the norms of interaction as a possible method of making the association between teachers and students happier and more productive.

First-Level Effects in Kent Elementary Schools

We shall turn now to a strategy of analysis different from the strategies used by Porter and Bigelow. In the rest of this chapter, looking at schools rather than individuals as the "unit of analysis," we shall apply measures of the first-level skills described in Chapter 3. We shall then investigate particular patterns in trained and untrained schools and how they changed from year to year.

Our analysis will be limited to elementary schools. We adopt this limitation for two reasons. First, it would be poor strategy to pool several levels of schools; organizational problems in large, departmentalized secondary schools are very different from those in small, less structurally complex elementary schools. This point was illustrated in Chapter 2 when we described the very different ways that consultation and training had to be adapted to schools K31 and K32. The differences are also mirrored in the schedules of training shown in Appendix 5-A. Second, there are too few trained secondary schools to draw meaningful conclusions.

In the analyses we are about to display, the "unit of analysis" will be the school, not the individual. This treatment of the data gives a direct answer to the kind of question our theory deals with: how do subsystems cope with problems? -- how do subsystems react to training for OD. In this chapter, we take schools to be subsystems of the district.

In treating the school as the unit of analysis, we are ignoring the fact that the personnel in a school change from year to year. We are ignoring too differences in the knowledge, skill, and readiness to be found in the individuals in the schools. The qualities of individuals do, of course, influence the organizational subsystems in which the individuals act, and the qualities of new personnel influence the schools they join. However, we have tried to build training designs for organizational improvement that could accommodate almost any sort of individual to be met in schools. If a method of organizational change is to be economically feasible, it must not require replacing even a fraction of the staff with the "right" kind of person. We prefer the efficacy of our training (and that of others) to be judged on the behavior of the school as a whole, without any excuses based on whether exceptionally capable or incapable people might be members. Furthermore, if effects of training are to be lasting in schools, they must be effects that can continue to exist in a school even while the personnel change.

The reliability of our data will be affected, of course, by the rates of response to the questionnaires. We asked every member of each school to answer the questionnaires.* In most cases, fewer than 100 percent returned questionnaires. This fact increases the error in the data and contributes unknown causes of variability to the tables of data we shall display below. For a number of technical reasons, (such as the fact that respondents were not a random sample) we have not tried to calculate probable errors in each school. As we shall see, enough pattern, both predicted and unpredicted, appears in the data that the results should be taken seriously.

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* When a person worked in more than one school, we labelled that person as belonging to the school in which he or she spent the most time or to the school the person felt to be his or her base. The overall rates of return were described in Chapter 2. The rates of return by school are shown in Appendix 5-B.

Before turning to the data dealing with first-level results in trained and untrained schools, we shall say something about the training in the elementary schools covered by the study. The training varied in the number of hours received between questionnaire administrations, in the personnel doing the training, and in the groupings of subsystems within the school receiving the training at various times. Table 5-10 shows the distribution of hours of training (excluding hours spent in entry, diagnosis, process consultation, survey feedback, and coaching, and including only training proper and follow-up training) and the source of the consultants (trainers). The bulk of the training was

Table 5-10. Total hours of training and follow-up consultation in elementary schools (excluding entry, diagnosis, etc.)

School	Hours between 1st & 2nd q'aire admin'n	Hours between 2nd & 3rd q'aire admin'n	Hours between 3rd & 4th q'aire admin'n	Total	Consultants
K05	6		6	12	CASEA and Kent cadre
K11	15		24	39	CASEA and cadre
K12		18	28	46	CASEA and cadre
K13		10	5	15	Cadre
K02			14	14	Cadre
K14			27	27	Cadre
K15			22	22	Cadre
A11*			14	14	Cadre

Note: First questionnaire was administered in January 1968,
second in May 1969,
third in April 1970,
fourth in April 1972.

* School A11 is from the Auburn School District.

devoted to first-level and second-level communicative skills and group problem solving. Further detail on the nature of the training in these schools is described in Chapter 2 and in Appendix 5-C, and further detail on the spacing of the hours of consultation and training is given in Appendix 5-A.

Communication, Openness, and Responsiveness

In Chapter 3, we stated five interpersonal or first-level skills that we postulated as building blocks necessary for building later subsystem skills which, in turn, would be the basis for heightened constructive adaptability in the school. Briefly, the five skills were:

1. Skills of communication that yield quick and accurate feedback in face-to-face situations concerning meaning, readiness to move in one direction or another, common reality, and commitment to proposed courses of action -- even during periods of anxiety or emotion.

2. Skill in converting frustrations into problem statements that can be analyzed in terms of the present situation, the ideal situation, and alternative plans for moving from the present to the ideal.

3. Skill in openness -- eliciting and giving timely information during discussion that is relevant to the task at hand.

4. Skill in responsiveness -- stating clearly what one will (or will not) do as a result of discussion, and then doing it. This can also be stated as readiness to take action in response to a perceived need.

5. Skill in bringing into view the personal abilities and resources of others, and of making known one's own.

This conception of first-level skills was gradually worked out as the Kent project progressed. As a result, we found ourselves at the end of the project with questionnaire items written with earlier and less systematic concepts in mind. We then had to select those items we believed would be the best indicators of the skills we wanted to assess. After allocating the items, we found we had none that would serve as indicators of skill in converting frustrations into problems. Consequently, we shall be able to report findings only on the other four skills.

Our pool of questionnaire items contained some that were used at all four questionnaire administrations. Among these were some that we had used with profit in an earlier study (Schmuck and Runkel, 1970) and that we had written to assess communicative skill, openness, and responsiveness. In this section, we shall examine these three variables in schools before and after training.

Three Tests over Four Years

The "test" on communication is one that indicates readiness to continue constructive communication in emotional situations. We shall call this test A on communication during emotion. The first two items of this test are the same as those numbered 1 and 2 in the earlier section describing Porter's study. The first dealt with communicating about feeling hurt or put down; the second with approving or disapproving of a person who tells his or her personal feelings in a meeting. The other two items in test A are those below; they are numbered 5 and 6* because we have already used the numbers 3 and 4 for the other two items in Porter's study.

Item 5. Suppose a teacher (let's call him or her Teacher X) is present when two others get into a hot argument about how the school is run. If teachers you know in your school were in Teacher X's place, what would most of them be likely to do? Would they try to help each one in the argument to understand the viewpoint of the other?

( ) Yes, I think most would.
( ) Maybe about half would.
( ) No; most would not do this.
( ) I don't know.

Item 6. Suppose you are in a committee meeting with Teacher X and the other members begin to describe their personal feelings about what goes on in the school; Teacher X quickly suggests that the committee get back to the topic and keep the discussion objective and impersonal. How would you feel toward X?

( ) I would approve strongly.
( ) I would approve mildly or some.
( ) I wouldn't care one way or the other.
( ) I would disapprove mildly or some.
( ) I would disapprove strongly.

Each of these four items gave respondents a chance to imagine themselves in an emotional situation. In answer to the items, respondents could indicate, in one direction, that they thought they or their colleagues should or would accept emotions as relevant matters to be dealt with, or, in the other direction, that they thought they or their colleagues should or would try to remove emotion by suppressing its evidences or avoiding emotional argument. We gave the higher scores, indicating the "favorable" direction of response, to those answers indicating a willingness to continue dealing with the emotion. The manner of calculating test scores from these items, and from the items of the other tests to be described, is set forth in Appendix 5-D.

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* We adapted items 5 and 6 and also items 9, 10, and 11 below from items kindly supplied to us by Ray Jongeward and Michael Giammetteo of the Northwest Regional Educational Laboratory in Portland, Oregon.

Test A concerns the readiness to get feedback concerning meaning and commitment to courses of action. It also touches on the fifth first-level skill of bringing into view personal abilities and resources. If we consider ideas to be "personal resources," then being able to exchange emotionally charged ideas is similar to being able to bring into view personal resources. We shall encounter this mixture again in Chapter 7, where we shall make use of the indicators Steven Saturen chose for the fifth first-level skill. In the meantime, we shall refer to test A as a test of ability to communicate effectively, but we shall now and again use the phrase "communication under emotion" to remind the reader of the special flavor of test A.

Test B on openness contains three items. The first is the same as that numbered 4 in the section on Porter's study; it asked about seeking out a colleague to continue discussing a disagreement. The following question was used in the other two items of test B:

Items 7 and 8. Perhaps there are some people in your organization with whom you talk rather frequently about matters important to you. Please think of people with whom you talk *seriously about things important to you*, inside or outside formal meetings, *once a week or more* on the average. Write their names below. (If there are fewer than six people with whom you talk once a week about matters important to you, write down only as many as there are; if none, write "none." If there are more than six, list just the six with whom you feel your conversations are the most satisfying.)

Item 7 was the mean number of persons named in response to the above question by teachers-and-others in the school. This classification of respondents includes teachers, teacher aides, assistant teachers, department heads, counselors, librarians, and nurses. Item 8 was the same as item 7 except that the number of persons named by the principal only was counted. These items, we believed, would enable people to tell us something about the ability of the people in the school to elicit and offer information.

Test C on responsiveness contains three items,* as follows:

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* For each individual item in tests A, B, and C, Appendix 5-E contains a tabulation and graph, showing means of trained and untrained elementary schools in Kent and of the elementary schools pooled in the Auburn and Federal Way districts.

Item 9. Suppose Teacher X wants to improve his classroom effectiveness. If X asked another teacher to observe his teaching and then to have a conference about it afterward, how would you feel toward X?

☐ I would approve strongly.
☐ I would approve mildly or some.
☐ I wouldn't care one way or the other.
☐ I would disapprove mildly or some.
☐ I would disapprove strongly.

Item 10. Suppose Teacher X develops a particularly useful and effective method for teaching something. In Teacher X's place, would most of the teachers you know in your school describe it briefly at a faculty meeting and offer to meet with others who wanted to hear more about it?

( ) Yes, I think most would do this.
( ) Maybe about half would do this.
( ) No; most would not.
( ) I don't know.

Item 11. Suppose Teacher X wants to improve his classroom effectiveness. In Teacher X's place, would most of the teachers you know in your building... ask another teacher to observe his teaching and then have a conference afterward?

( ) Yes, I think most would do this.
( ) Maybe about half would do this.
( ) No; most would not.
( ) I don't know.

Item 9 offered respondents a chance to approve or disapprove of a colleague doing something active and expecting something active from a colleague in response. It describes a situation in which one colleague exhibits responsiveness to a problem and asks for responsiveness from a second colleague. The item gives us an idea of how a school's staff reacts to action ideas. The other two items offered respondents a chance to indicate whether they thought others in the school would or would not be responsive in ways similar to item 9. We interpret test C as an indicator of responsiveness since it ascertains approval of readiness to take at least minimal action in response to a perceived need.

Note that all three of these tests deal with interactions of relatively small scope. All three ask respondents about interpersonal situations or hypothetical incidents that need not involve a full subsystem; these incidents could occur and have meaning between two or three members of a subsystem while affecting the rest only minimally. This is the sort of situation in which we have said that first-level skills can be put to profitable use.

After we had selected the questionnaire items to make up the three tests, we made some predictions about the possible patterns that might be found among the three tests. We believed test A to be a good indicator of a communicative skill that we have always taken to be basic -- that is, to be necessary to more complex communicative skills. In our training designs, we almost always included instruction in the "basic" communicative skills as an early part of the work. The designs described in Chapter 2 and in Appendices 4-D and 5-C show that we and the Kent cadre typically taught, early in the schedule, the skills of paraphrasing, behavior description, description of feelings, and description of one's perception of another's feeling. To these, we and the cadre often added instruction in the skill of giving and receiving oral feedback and the skill of making an oral survey of opinions or feelings in the group. Given our theoretical position, and given also our impressions of the helpful results of early teaching of communicative skills, especially those of communicating during emotion, we predicted that schools would score high on test C (responsiveness), on the average, only if they scored high on test A (communication during emotion). We also viewed openness to information (test B) as helpful to responsiveness, but not as necessary as ability to communicate under emotion (test A). We predicted that schools scoring high on test C would also score high on test B, on the average, but that this relation would not be as strong as that between test A and test C.

Having made these predictions, we proceeded to analyze the data. The results of the analysis, as we shall see in detail below, led us to two conclusions: (1) it is likely that organizational training will improve responsiveness in schools where the staff believes that colleagues would persist in task-oriented communication even where it was emotionally stressful and (2) that it is also likely that organizational training will depress responsiveness in schools where skill at communication during emotion is below average.

Method of analysis. It might seem that the next step in determining first-level effects of training would be to compare the scores on the tests of trained and untrained schools. Indeed, in Appendix 5-E there is a tabulation and graph for each item on the tests showing that most trained schools scored better than most untrained schools on most items. In this chapter, however, we shall not compare the schools in this way for two reasons. One is that our data (partly because they are taken from life and not from the rigorously controlled atmosphere of a laboratory) in many ways did not meet the requirements of statistical methods; it would be difficult to determine with any accuracy the statistical significance of comparisons. The second reason is connected with the exploratory nature of this research. The variables we are dealing with, as we shall see even more clearly later, all interact in complex ways -- ways that we must try to understand in the formulations of our theories. If we isolate just one variable at one point in time, then we will be ignoring too much other relevant information. As practitioners of organizational development, our greatest interest is in what we can learn from the complex patterns that emerge when several variables interact over time.

We did not want to examine the effects of training on these tests item by item or even test by test. We wanted to discover the patterns of interrelationships among these tests that could result from training or from a lack of training in OD. Indeed, we would have preferred to include all five first-level variables in the analysis. But we had no items at all on converting frustrations to problems, and our indicators of skill in bringing ability and resources into view were available only in the questionnaires of 1970 and 1972. Consequently, we had to content ourselves with the joint analysis of the three tests of communication-during-emotion, openness, and responsiveness. Nevertheless, we shall see that there is a great deal to be learned from these three.

We have repeatedly set forth in this book the idea that most schools operate under a set of norms about authority, communication, and the like that limits unnecessarily the use of resources, the inventiveness, the interpersonal rewards -- in short, the constructive adaptability -- that the school could have under a revised set of norms. We have also said that the task of organizational development is to enable the school to achieve that more productive set of norms. This view led us to predict that schools that achieve the new set of norms would become different from the schools that continue using the old norms.

Of course, we have just oversimplified the matter. We mean to say that since new norms must differ noticeably from old norms, schools following the new norms must be more like one another than like schools following the old, and conversely. This is almost tautological. But we also mean to say that we think more schools can move from the old norms to the new norms with training than without. In this study, we used a method of data analysis designed to reveal whether the schools grouped themselves or "clustered" in a way that had to do with similarities or differences among them. We hoped to find that clusters of similar schools would appear in the data, that at least one of the clusters would show evidences of the new norms, and that the trained schools would appear in that cluster more often than would happen by chance. The first-level skills that we examined here are some that should appear early in a school that is moving toward the new norms. Hence, we believed that we could test the movement of schools toward the new norms -- and, consequently, the effects of the training they got -- by finding out how similar or dissimilar the trained and untrained schools were on tests A, B, and C, which we took to be indicators of skills that support the new norms.

This was a bold prediction. The total amounts of training given to the elementary schools we studied here are small,* as Table 5-10 showed. The effects of the training may not have been large, and where the effects are detectable, they may be spotty -- they may be stronger on test A in one trained school, for example, and stronger on test B in another. Errors in the data may sometimes override what small effects the training had. Furthermore, sudden rises in any of these variables could be caused by a new enthusiasm in the school or by a fairly strong effort to launch an organizational innovation. In Chapter 6, for example, we shall see that new norms for communication were evident to some degree in schools that strove to adopt multiunit structure. These are the hazards the prediction ran. Actually, as we shall see later, our prediction was too simple. We shall see that schools did cluster, but they did not remain in the same cluster from year to year. We shall see too, that more trained schools did achieve the new norms with training than without, but only if the relationship between tests A and B was right.

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* In later work, we came to the conclusion that about 80 hours of training is a realistic estimate of the minimum amount for the first year of organizational development. The best source of information on this point is in the report by Schmuck, Murray, Schwartz, Smith, and Runkel (1975).

How did we calculate and compare the similarities and differences among schools on their scores onthese three tests? We have already indicated that we wanted to discover more than merely which schools had the highest scores. The method we chose to use in our analysis was that of nonmetric multidimensional scaling. Underneath this polysyllabic label is a rather simple idea. First, calculate some sort of index of similarity between every pair of schools (such as the correlation over pairs of test scores). Then, translate similarity into distance; that is, let distances in space coorespond to those measures of similarity. Specifically, let two similar schools be represented close together and let two dissimilar schools be represented far apart.

Suppose we use gumdrops to represent schools and attempt to arrange them on a piece of paper with similar gumdrops close together and dissimilar gumdrops far apart. To make the distances between them more concrete, let us use toothpicks to connect the gumdrops, using shorter toothpicks between gumdrops that are more similar and longer sticks between less similar gumdrops. One could then look at the pattern of sticks and gumdrops arranged on the piece of paper and see at a glance the clusterings that are groups of similar gumdrops (or schools) and the long distances between gumdrops that indicate dissimilarities.

There are some technical difficulties in fitting this spatial model together. Suppose our indices of similarity among the gumdrops are based upon color. We place an orange and a red gumdrop close together joined by a short toothpick. Then we add a blue gumdrop using two long toothpicks since it seems very dissimilar to both orange and red. Then we want to place a purple gumdrop. We want it to be very close to both blue and red, and yet these two gumdrops are very far apart. The problem is that if the interrelations among the gumdrops (or schools) are complex, one might find, after placing a number of sticks, that a certain distance is too short or too long to be represented by a stick that also must fit in the already existing arrangement. There are actually some relatively simple ways to solve these arrangement problems, but one can see that with a large number of colors or with striped gumdrops, the interrelationships among the gumdrops could become extremely complex.

The fact that we have been arranging gumdrops on a picec of paper means that we have been confining ourselves to a two-dimensional space. One way to help solve the technical problems involved in arranging gumdrops would be to create a three-dimensional construction of gumdrops. Then we would be able to put gumdrops in more places which satisfy all our requirements. Mathematically, we could even make the arrangement easier by using four or five or even more dimensions.

Another way to solve the problems involved in arranging the gumdrops would be to stretch some of the sticks and squeeze others, so to speak, while still maintaining to some acceptable degree the chief pattern among the gumdrops; that is, we could change the distances between the gumdrops a little without changing the relative order of the distances. For instance, if one index of similarity between two gumdrops (or schools) were larger than another, we could try only to maintain the "larger-than" relationship, without trying to keep the spatial distances in exactly the same ratio as the original numerical indices of similarity. Several methodologists in the social sciences have indeed invented methods of representing similarities that combine these two solutions to the problems. In one class of these mathematical methods the computer makes trial arrangements (of schools, for example) in one, two, three, or more dimensions and for each arrangement tells how good the "fit" is -- that is, how well the trial arrangement represents the similarity measures in the original data. The user then can choose from among all these trial arrangements how close a fit he or she will need. Mathematical methods with the features just described are called nonmetric multidimensional scaling because they do not use actual numerical measures of similarity (number of inches, so to speak) but instead only the order of measures.

We chose a nonmetric method of arranging our schools to ascertain which schools grouped or clustered together. The particular computer program we chose to do this was the Guttman-Lingoes MINISSA-I(M).*

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* For documentation and background on the MINISSA program, see Guttman (1968), Lingoes (1965, 1966a, 1966b, 1967, 1968, 1971), Lingoes and Roskam (1971), and Roskam and Lingoes (1970). The more important options of the program were set as shown below; the labels of the options (e.g., 4b and MIND) are those used in the preface to the program itself.

4b. Program determines the minimum number of dimensions (MIND = 0).

4c. Largest number of dimensions set at three (MAXD = 3).

4d. Inputs are correlation coefficients -- that is, similarities (ISIM = 1).

4g. Kruskal's stress not to be minimized (IFGLK = 0).

4h. Configuration not to be input (IFCONF = 0).

4l. Euclidean metric (IFE = 0).

To use this method of analysis, we first had to calculate an index of similarity for every pair of schools. We chose to use the correlation coefficient between each pair of schools over the three tests because a correlation coefficient, being a way to express how closely associated two things are, is itself an index of similarity.

As we began to calculate the coefficients, two other technical considerations arose. First, different tests had different ranges of scores because they had different scales or numbers of scale points. Yet, we didn't want a school to seem higher on one test than another merely because one test couldn't give as high a numerical score as the other test could give. Second, the ranges of scores on some tests in one district were different from the ranges in another district. However, in this analysis we did not want to compare districts with each other. We were more interested in the standing of each school in relation to the others in its own district. Different districts may have different norms, policies or expectations about change, and we wanted to look at effects of training in schools independent of these variables. To solve these two problems we began by converting the score of each school on each test from the direct or raw score to a score adjusted for the spread of scores on that test throughout the schools in the district. That is, we converted to *standard scores*. This was done by subtracting the mean score of the district from the raw test score and dividing the difference by the standard deviation of the raw scores. We shall use these standard scores in the rest of our discussion. If a school has a positive standard score, it lies above the district mean; if a negative standard score, below.

We next calculated the correlations within every pair of elementary schools in Kent over the three tests, using the standard test scores. We fed the correlations into the computer along with the MINISSA instructions, instructing the computer to pay attention only to the *rank order* of the correlations. We did this because we did not want to give too much importance to the *exact values* of correlations derived from only three test scores.*

The way the computer arranged the schools according to their test scores in 1968 is shown in Figure 5-1. What the computer gave us in each year were the numbers lying in a circular arrangement, each number standing for a school. As it turned out, the computer was able to

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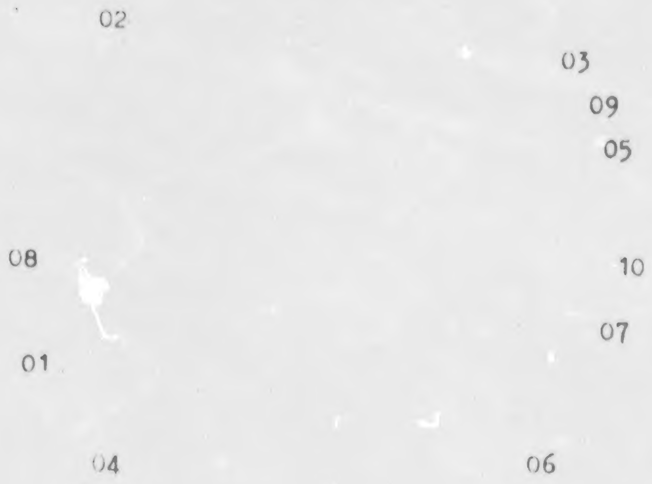
* MINISSA plots for elementary schools in Auburn appear in Appendix 5-F.


02
03
09
05
08
10
07
01
04
06

1968

Figure 5-1
Similarities among Kent elementary schools in respect to scores on tests A, B, and C.

Key

02 Each number on the diagram stands for a school taking tests A, B, and C in 1968.

show the relationships between the schools by arranging them in a circle. It didn't need to use several dimensions to show the relationships because the relationships really weren't very complex. There were only three tests used to calculate the correlations between schools, and the computer paid attention only to the ordering of them, not their exact values. Under these conditions, no matter how complex the interrelations among schools on the three tests, it will always be geometrically possible to represent the interrelations in two dimensions (such as the surface of a piece of paper) with the schools spread circularly.

Although it was a foregone conclusion that the schools would lie on the paper in an approximate circle, it was not a foregone conclusion that the spaces between the schools around the circle would take any particular pattern. In particular, it was not necessary at the outset that the points on the paper representing schools would cluster. But they did. In 1968, for example, the gaps between schools K02 and K03* at the top of the circle, and between schools K04 and K06 at the bottom, are both very much larger than any gap between two schools at any other place around the circle. In other words, in the plot for 1968 we can easily distinguish two separate clusters of schools -- one at the left and the other at the right of the diagram.

We next examined the relative elevations of the scores achieved by the schools on the three tests. We noticed, for example, that all the schools that had highest scores on test A, next highest scores on test C, and lowest scores on test B were all adjacent to each other on the diagram. In fact, all the schools with the same orderings of scores were adjacent to each other. To make it easy for the reader to remember the patterns among test scores, we added some lines and labels to the circular plots to create the diagram shown in Figure 5-2. The label ACB, for example, indicates that the schools in that region scored highest on test A, next highest on test C and lowest on test B. The radiating lines separate the schools having one ordering on the tests from the schools having another ordering. The fact that schools having the same orderings of scores were adjacent to each other was actually no surprise. The correlation coefficients used to arrange the schools were high between schools that had the same orderings of test scores, so the computer arranged these schools close together.

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* For simplicity, we drop the letter designating the district in the figure, but we shall retain it in the text.

We then looked at the clusters of schools in Figure 5-2 and at the arrangement of schools within the six regions to try to determine what distinguished the schools in one cluster from those in the other. We had hoped that at least one of the clusters would show evidences of the new norms and that the trained schools would appear in that cluster more often than chance. However, this was not the case. The schools did cluster in a way that was connected with the effects of training but not in the simple way we predicted.

Wehn we looked at the diagram, a pattern virtually leapt out. In every year, we found that every school in the right-hand cluster stood higher on test A (communication) than on test B (openness). In the left-hand clusters, in contrast, the schools stood higher on test B than on test A. In both clusters, however, test C ranged from top to bottom over the schools.

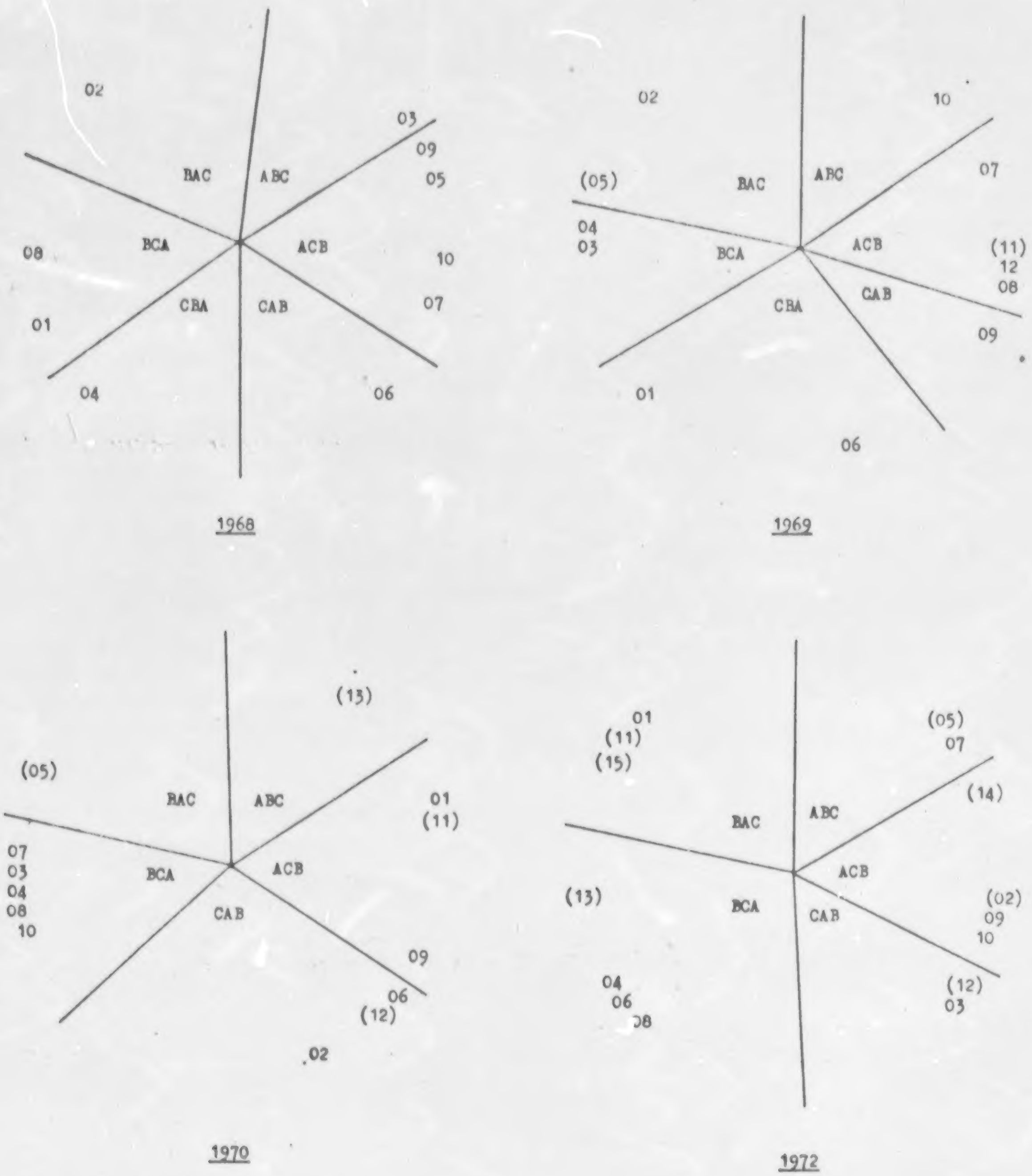
02
03
09
05
BAC
ABC
08
BCA
ACB
10
CBA
CAB
07
01
04
06
1968
02
10
(05)
BAC
ABC
07
04
03
BCA
ACB
(11)
12
08
CAB
CBA
09
01
06
1969
(13)
(05)
BAC
ABC
01
(11)
07
03
04
08
10
BCA
ACB
CAB
09
06
(12)
02
1970
01
(11)
(15)
(05)
07
(14)
BAC
ABC
ACB
(13)
BCA
CAB
(02)
09
10
(12)
03
04
06
08
1972

Figure 5-2

Similarities among Kent elementary schools in respect to standard scores on tests A, B, and C

Key

ABC	In each region, the first-listed letter tells the test on which the schools in that region scored highest, the second tells the test on which they scored next highest, and the third the test on which they scored lowest. For example, in 1968, school K05 scored highest on test A, next on C, and lowest on B.
(11)	A school whose number appears in parentheses received training or consultation at some time previous to the year shown.

The one exception to this rule is the case of school K06 in 1969. But the gap between school K06 and the right-hand cluster was almost as large as the gap between it and the left-hand cluster. Arbitrarily, we took the placement of school K06 as a measurement error and assigned it to the left-hand cluster.

Next, we examined the scores on tests A and B to ascertain the strength of this clustering. How different were the two clusters on their standard scores on these two tests? To answer this question, we divided the schools into four categories: whether (1) trained or (2) untrained and whether (3) belonging to the cluster with test A higher than B (designated Ab) or (4) to the one with test B higher than A (designated Ba). Within each of these four categories, we calculated the means on both tests in each year at which there were trained as well as untrained schools -- 1969, 1970, and 1972. The result was eight groupings of three means each; these are displayed in Table 5-11. In this table, the left-hand clusters of Figure 5-1 are called cluster Ab, and the right-hand clusters are called cluster Ba.

We have arranged mean scores of groupings of schools in Table 5-11 to make it easy to compare the elevations of mean scores for trained schools of cluster Ab on their higher test (namely, test A) with the elevations of mean scores for trained schools of cluster Ba on their higher test (namely, test B), and so on down the page. (Remember that cluster Ab schools have scores on test A higher than those on test B, by definition, and cluster Ba schools have B higher than A, by definition.) The year in which a mean occurred has no importance in Table 5-11, but we have mentioned the year to respond to the possible curiosity of the reader and also to make it clear where the three means came from in each grouping.

Table 5-11. Means of standard scores of trained and untrained elementary schools in Kent on tests A and B within clusters Ab and Ba

	Cluster Ab	Cluster Ba
	Trained schools	
Higher test	(Test A)	(Test B)
	1.51 in 1970	0.77 in 1972
	1.01 in 1972	0.37 in 1969
	1.00 in 1969	0.28 in 1970
Lower test	(Test B)	(Test A)
	0.35 in 1970	0.02 in 1972
	0.22 in 1969	-0.16 in 1970
	0.09 in 1972	-0.45 in 1969
	Untrained schools	
Higher test	(Test A)	(Test B)
	0.48 in 1969	0.69 in 1970
	0.04 in 1972	0.59 in 1972
	-0.09 in 1970	0.57 in 1969
Lower test	(Test B)	(Test A)
	-0.69 in 1969	-0.59 in 1969
	-1.20 in 1970	-0.80 in 1970
	-1.26 in 1972	-1.07 in 1972

Looking from one side of Table 5-11 to the other -- that is, from cluster Ab to cluster Ba -- we see the following pattern among trained schools: the means in the higher test of cluster Ab (test A) ran higher than the means of the higher test of cluster Ba (test B those who did best on A did better on their best test than those who did best on B. In fact, there was no overlap; the lowest mean standard score in cluster Ab was higher than any mean standard score in cluster Ba. The same relation was true between the mean scores of trained schools on their lower tests. But among untrained schools, the pattern was reversed. Means on both the higher and lower tests among untrained schools in cluster Ab ran lower than the corresponding means among untrained schools in cluster Ba. This result is not an artifact. The fact that we had converted the original test scores to standard scores assured us that the tests had had equal available ranges. Clearly, there were complex connections between the training and the elevations of the skills represented by tests A (communication) and B (openness).

A discussion of several more patterns in Table 5-11, can be found in Appendix 5-G. Here, we content ourselves with a summary conclusion; namely, that trained and untrained schools differed from each other much more on these two tests in cluster Ab than they did in cluster Ba. Within cluster Ab, trained schools did better than untrained on both tests. Within cluster Ba, trained schools did better than untrained on test A, but about equally well on test B. Not only did the schools cluster according to part of their similarity or dissimilarity on tests A, B, and C, but they clustered in a way that was connected with the effects of training! After we complete our examination of one more aspect of the pattern the computer showed us, we shall see what implications this conclusion has for organizational development.

Effects on responsiveness. We have yet to examine test C on responsiveness in clusters Ab and Ba. We saw in Figure 5-1 that the scores of schools on test C ranged from highest of the three tests to lowest in both clusters. Did the C-scores of schools range without any pattern in the two clusters, or shall we find that the elevations of scores on responsiveness were connected in some way with the clusters and with training?

We examined standings on test C in much the same way that we examined standings on tests A and B. Within each year and cluster, we calculated the means of trained and untrained schools. The resulting means are shown in Table 5-12. It is obvious that the clustering again makes a difference. A pattern stands out that is remarkably uniform from year to year.

Table 5-12. *Mean standard scores of groups of elementary schools in Kent on test C, grouped according to cluster Ab or Ba, year, and whether trained or untrained by that year*

		Cluster Ab		Cluster Ba		
		Mean on test C	No. of schs	Mean on test C	No. of schs	Difference
1968	Untrained	-0.25	6	0.38	4	-0.63
1969	Trained	0.79	1	-0.50	1	1.29
	Untrained	-0.05	5	-0.00	5	-0.05
	Difference	0.84		-0.50		
1970	Trained	0.69	3	-0.30	1	0.99
	Untrained	-0.20	4	-0.20	5	0.00
	Difference	0.89		-0.10		
1972	Trained	0.82	4	-0.77	3	1.59
	Untrained	-0.23	4	-0.01	4	-0.22
	Difference	1.05		-0.76		

In every one of the last three year, the lowest and highest of the four means lay with the trained schools! That is, in 1969, the trained school in cluster Ab had the highest of the four means (0.79) and the trained school in cluster Ba had the lowest (-0.50), and the same pattern appeared in the following years. The means of trained schools in cluster Ab of 0.69 and 0.82 were the highest means of 1970 and 1972, respectively, and the means of trained schools in cluster Ba of -0.30 and -0.77 were the lowest of those years. Furthermore, the differences between the trained groups were large within the spread of scores in the district. Differences between clusters are shown in the right-hand column. Within trained schools, differences between clusters were about one-and-a-quarter standard deviations in 1969, about one standard deviation in 1970, and more than one-and-a-half standard deviations in 1972. These are important differences.

What are we to think of these results? At first glance, the spread of means among the trained schools tempts us to recall the many studies in education and psychology in which training, special treatment of some other kind, or even merely testing had the effect of spreading out scores on almost anything -- but spreading them out significantly more in the treated group than in the control group whose routine was not disturbed. We might be tempted, that is, to say, "Well, you fuss around in schools, and you are going to spread out the range of their scores on responsiveness and on almost anything else you might have measured. It always happens. What's new?"

But that conclusion would be a mistake. The means in the trained schools spread out, it is true, but they did so in a very patterned way, not in a random way. The means on test C spread out in a pattern that put the higher ones in cluster Ab and the lower ones in cluster Ba -- and they repeated this pattern exactly in every year! Furthermore, the clusters themselves fit with the results for test C in a way that makes sense theoretically.

What do all these complicated patterns in the data mean? We have pointed out in Chapter 3 how necessary we believe communication skills to be, especially those of communicating under emotionally disturbing conditions. Correspondingly, among the schools that underwent training, those that showed the higher levels of responsiveness turned out to be those with exceptionally high scores on communication under emotion (test A) and with at least positive scores on openness toward information (test B). Conversely, those trained schools showing the lowest levels of responsiveness were those with usually negative scores on communication and only moderately positive scores on openness.

Summing up the apparent effects here, we can say that training affected the scores of all three tests in the predicted direction; that is, training produced high scores. Beyond this, when training was given to schools that scored the highest on test A, the scores on test C reached higher means than in any other combination. High scores on test B added little to the effectiveness of training.

Maintaining responsiveness. Unlike some effects of training we shall see in later chapters, the mean of trained schools in cluster Ab on test C did not diminish by 1972. We saw in Table 5-12 that their 1972 mean of 0.82 was the largest of the three years.

There is another way we can test whether responsiveness maintained itself better in trained schools than in untrained. We can take every instance of a school that had a mean on test C larger than 0.50 (to pick a level low enough to give us a reasonable number of cases) and then look to see whether the means went up or down in the following year (see Appendix 5-G). Here are the results:

Untrained schools:

K01, at 1.73 in 1968, went down to 0.19 in 1969.
K04, at 0.58 in 1968, went down to -0.02 in 1969.
K08, at 0.83 in 1968, went down to -0.47 in 1969.
K03, at 1.07 in 1969, went down to 0.34 in 1970.
K06, at 0.54 in 1969, went down to 0.13 in 1970.
K09, at 0.64 in 1970, went down to -0.56 in 1972.

This is what we should expect, of course, from the ubiquitous regression effect. Each time a test is readministered, there is a tendency for the score to move closer to the mean. Therefore, a score that is high tends to come down unless there is something to keep it up. We shall have more to say about the regression effect, with other data, in Chapter 10. But let us look to see whether trained schools similarly succumbed to the regression effect.

Trained schools:

K12, at 1.91 in 1969, went up after training to 2.80 in 1970.
K11, at 0.79 in 1969, went down to 0.34 in 1970.
K12, at 2.80 in 1970, went down to 2.57 in 1972.

We see that K12 provided us the only case of a school overcoming the regression effect and actually increasing its mean on responsiveness from one year to the next. Furthermore, its descent to 2.57 in 1972 was hardly a descent at all, relatively speaking. K12 still had the highest mean of any of the schools in 1972, and its nearest competitor reached only to 1.31!

The descent of school K11 from 0.79 to 0.34 is not a bad showing, either. Let us look back at all the untrained schools that had means at 0.79 or higher, and see how they fared:

K01 went down from 1.73 to 0.19, a drop of 1.54.

K08 went down from 0.83 to -0.47, a drop of 1.30.

K03 went down from 1.07 to 0.34, a drop of 0.73.

In contrast, school K11, whish did not stay up on test C as well as did K12, went down from 0.79 to 0.34, a drop of only 0.45. All in all, it seems to us that the trained schools maintained their high scores on responsiveness much better than the untrained schools did.

Harmful effects of training. We have seen in Table 5-12 that training apparently produced high responsiveness under certain conditions and produced low responsiveness under other conditions.* Among the

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* We have not tried to apply a test of statistical significance to the differences in Table 5-12, nor shall we do so with similar tables to be displayed later. There are too many ways in which those data fail the requirements of statistical methods that could otherwise test the chance probability of data cast into the form of Table 5-12. We shall present a longer list of methodological complications in Chapter 13.

In most cases, instead of applying sensitive statistical tests, we shall rely on repeated predicted patterns to make our case, and upon the practical magnitude of the effects.

Despite what we have just said, we shall apply statistical tests of significance here and there as we go along. We shall use them when we have arranged our data in ways that violate the assumptions of the tests in fewer ways than do the data in Table 5-12. For example, although we know of no statistical test that can cope with the confoundings in Table 5-12, we did find a test for the results shown in Figure 5-1. Spence and Ogilvie (1973) have offered a method of ascertaining the likelihood that a solution by nonmetric multidimensional scaling has been generated by random data. The method makes use of Kruskal's (1964) stress coefficient. By the method of Spence and Ogilvie, our plots for tests A, B, and C (and for tests D, E, and F to be presented later) have a chance of being random plots somewhere in the millionths. For example, for a plot of Kent elementary schools in the years 1969-70 combined, the stress value three standard deviations beyond the chance stress value is 0.0189. Spence and Ogilvie recommend rejecting the chance hypothesis if our obtained stress value is less than the value three standard deviations out. Our obtained value was far below the criterion; it was 0.00081.

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schools in cluster Ab, where scores on communication (A) were strong, training produced relatively high scores on responsiveness. But in cluster Ba, where scores on communication were negative, training produced negative scores on responsiveness. And these latter scores among trained schools were more negative, in all three years, than the negative scores of untrained schools.

Consultants have long known that organizational training sometimes "goes well" and sometimes not. By interpreting Table 5-12, we can see one likely reason that training sometimes has deleterious effects. We can now be careful, in the future, to ascertain the level of skill of a school in communicating under emotion and the extent to which its members seek occasions to discuss important matters with others. It is possible that schools with at least positive scores on openness and strong scores on communication will be likely to respond to training with improved responsiveness. Schools with negative scores on communication, even though their openness is moderately positive, will be likely to respond to training with deteriorated responsiveness. With this forewarning, we can avoid some ill effects in future consultation.

Of course, in this analysis, all three variables, A, B, and C, were examined at one time of assessment, with schools being considered "trained" if some training had taken place previous to the assessment. Therefore, the question arises whether any one variable had a direct causal effect on others. More particularly, did having better scores on communication (test A) cause training to have superior effects on responsiveness (test C), or did effective training cause an elevation of the scores of all three tests A, B, and C -- or, for that matter, did the schools that volunteered for training turn out to be those that were already high on the tests?

As to the effects of training, we note that we called a school trained if it had received training previous to the year in which the questionnaire data are being examined. We certainly would not want to say that having a high score on a test caused a school to volunteer for training before it took the test. And the trained schools did not necessarily have high scores before training, as we have seen. Moreover, the evidence we presented in the section on "Maintaining responsiveness" further supports the hypothesis that training had causal effects on the test scores.

As to the matter of the relation between training and tests A and B, on the one hand, and test C on the other, Table 5-12 shows that the effect of training was not a simple elevation of all the test scores. Training actually seemed to produce a decrement in test C when scores on test A were lower than test B, even though scores on test B were relatively high. In sum the evidence seems to us to say that training succeeded in raising test scores in some of these schools (not all) but it was only when scores on test A were high that training was able to elevate scores on test C.

Despite these arguments, we recommend that the school or consultant watch all "gauges" at once. If communication and openness both stay below average, or if communication stays low in relation to openness, then the school will probably remain below average on responsiveness, and training of the sort conducted in the Kent project may even keep it there.

The questionnaire results that we have from four different years of assessment make another thing clear. We can see that schools do not stay in the same cluster every year. This means that an intervener cannot assess a school at one point in time and assume that it will stay the same. A school's skills of communication, openness, and responsiveness can change from year to year, and as these skills change, so does the way the school will respond to training. Interveners may have to assess a school's condition more than once when trying to determine what the effects of training will be.

These findings are important in themselves, but their importance becomes greater as the beginning of a story that will have further installments in Chapters 6, 7, 8, and 10. The data we collected during the Kent project enable us to examine a series of conditions that surrounded the training given by the Kent cadre and by ourselves. In this chapter and the next four, we shall discuss these conditions as indicators of readiness for training or as conditions that heighten or lower the effectiveness of training.

But we still have a few things to tell in this chapter. For one thing, there were some other items on the questionnaires that seemed to be indicators of communication, openness, and responsiveness, and these enabled us to conduct a quasi-replication of the study we have just described.

Three Tests Over Three Years

We chose items for tests A, B, and C that were available in all four years. In addition to those, we had some items that were available in each of the first three years of the project. Furthermore, it was possible to assign these items to three tests that seemed very parallel in meaning to tests A, B, and C.

Test D on communication during emotion. This test consists of two items; one is item number three of Porter's study. It asked whether the respondent would approve of Teacher X if two others got into a hot argument and Teacher X tried to get them to quiet down and stop arguing. The other item in test D is this one,* in which the "favorable" direction of response is the approving one:

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* We adapted all of the items in tests D, E, and F from items kindly supplied to us by Ray Jongeward and Michael Giammetteo of the Northwest Regional Educational Laboratory in Portland, Oregon. Appendix D explains the assignment of scoring weights and the calculation of standard scores.

Item 12. Suppose Teacher X were present when two others got into a hot argument about how the school is run. Suppose Teacher X tried to help each one to understand the views of the other. How would you feel about the behavior of Teacher X?

( ) I would approve strongly.
( ) I would approve mildly or some.
( ) I wouldn't care one way or the other.
( ) I would disapprove mildly or some.
( ) I would disapprove strongly.

Test E on openness. This test has a single item. The "favorable" response is "No, most would *not*."

Item 13. Suppose Teacher X strongly disagrees with something B says at a staff meeting. In Teacher X's place, would most of the teachers you know in your school keep it to themselves and say nothing about it?

( ) Yes, I think most would do this.
( ) Maybe about half would do this.
( ) No; most would *not*.
( ) I don't know.

Test F on responsiveness. This test has four items.* The favorable direction of response to the first three is "yes." The favorable direction of response to item 17 is approval.

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* For each of the items in tests D, E, and F, Appendix 5-E contains a tabulation and graph, showing means of trained and untrained elementary schools in Kent and of the elementary schools pooled in the Auburn and Federal Way districts.

Item 14. Suppose Teacher X wants to improve his classroom effectiveness. In Teacher X's place, would most of the teachers you know in your building ask other teachers to let him (Teacher X) observe how the other teachers teach, to get ideas how to improve their own?

( ) Yes, I think most would do this.
( ) Maybe about half would do this.
( ) No; most would not.
( ) I don't know.

Item 15. Suppose Teacher X develops a particularly useful and effective method for teaching something. In Teacher X's place, would most of the teachers you know in your school try to get administration backing for a project to get other teachers to use the method?

( ) Yes, I think most would do this.
( ) Maybe about half would do this.
( ) No; most would not.
( ) I don't know.

Item 16. Suppose Teacher X wants to improve his classroom effectiveness. In Teacher X's place, would most of the teachers you know in your building ask the principal to observe his teaching and then have a conference afterward?

( ) Yes, I think most would do this.
( ) Maybe about half would do this.
( ) No; most would not.
( ) I don't know.

Item 17. Suppose Teacher X wants to improve his classroom effectiveness. If X asked another teacher to let him (X) observe the other teacher teach, how would you feel toward X?

( ) I would approve strongly
( ) I would approve mildly or some
( ) I wouldn't care one way or the other.
( ) I would disapprove mildly or some.
( ) I would disapprove strongly.

Because tests D, E, and F seemed to us reasonably close in meaning to tests A, B, and C, we decided to determine whether tests D, E, and F would cross-validate the results we got from tests A, B, and C. To make this trial, we needed only to group the Kent elementary schools on tests D and E in a way similar to the way we grouped them with tests A and B, and then see whether the mean scores on test F showed a pattern similar to the means on test C. But we ran the MINISSA program anyway, to see what the clustering would look like. The MINISSA plots for tests D, E, and F (three years only, remember) are shown in Figure 5-3.*

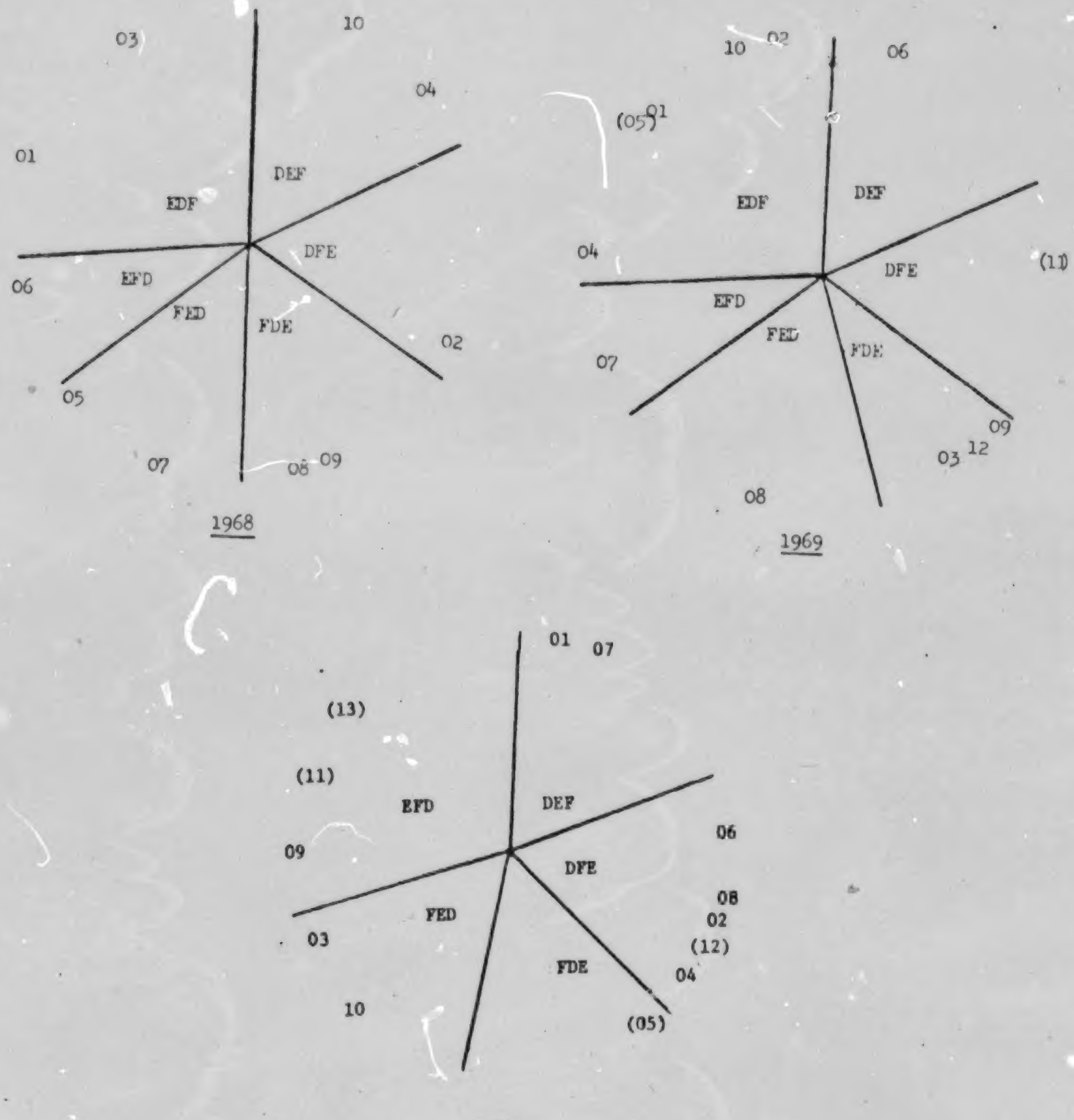
---

* MINISSA plots for elementary schools in Auburn appear in Appendix 5-F.

It is a good thing we began our analysis with tests A, B, and C rather than with D, E, and F. Only in the 1970 plot in Figure 5-3 do the clusters show as clearly as they did with the earlier tests. The weaker clusterings in Figure 5-3, compared to Figure 5-2, did not make us optimistic about the rest of the analysis, but we carried on with it to see what would happen.

It turned out that the means on communication and openness given by tests D and E took on some of the same pattern that we saw among means on tests A and B in Table 5-11. Designating by De those schools having higher means on communication than on openness and by Ed those with the converse order, we discovered the same pattern among trained schools that we had discovered in the clusters Ab and Ba. That is, the means in the higher test of cluster De ran higher than the means of the higher test of cluster Ed; in fact, there was no overlap. The same relation held between the mean scores of trained schools on their lower tests. See Appendix 5-H for the actual numbers.

The pattern among untrained schools, however, surprised us -- it was the same as that among trained schools. This was a surprise because, when we had clustered the schools by tests A and B, the pattern


03
10
04
01
DEF
EDF
DFE
06
EFD
FED
FDE
02
05
07
08
09
10
02
06
(05)01
EDF
DEF
04
(11)
DFE
EFD
FED
FDE
07
09
12
03
08
01
07
(13)
(11)
EFD
DEF
06
09
DFE
08
FED
02
03
(12)
FDE
04
10
(05)

1968

1969

1970

Figure 5-3

Similarities among Kent elementary schools in respect to standard scores on tests D, E, and F.

DEF In each region, the first-listed letter tells the test on which the schools in that region scored highest, the second tells the test on which they scored next highest, and the third tells the test on which they scored lowest. For example, in 1970, school K07 scored highest on test D, next on E, and lowest on F.

(12) A school whose number appears in parentheses received training or consultation at some time previous to the year shown.

among untrained schools had turned out to be the opposite of the pattern among the trained schools. What did this half-new pattern bode for the standing of schools on our new measure of responsiveness -- test F?

Validation. We laid out the means on test F in Table 5-13 and looked to see whether the patterns in Table 5-12 had reappeared in Table 5-13.

Table 5-13. Mean standard scores of groups of elementary schools in Kent on test F, grouped according to cluster De or Ed, year, and whether trained or untrained by that year

		Cluster De		Cluster Ed		
		Mean on test F	No. of schs	Mean on test F	No. of schs	Dif-ference
1968	Untrained	0.33	5	-0.33	5	0.66
1969	Trained	0.50	1	-0.45	1	0.95
	Untrained	0.90	4	-0.60	6	1.50
	Difference	-0.40		0.15		
1970	Trained	1.40	2	-0.53	2	1.93
	Untrained	-0.52	6	0.46	3	-0.98
	Difference	1.92		-0.99		

Looking at the performance of trained and untrained schools in 1969, we see that the pattern given by test F was quite upside-down in comparison with the pattern given by test C. In Table 5-12 (test C), the highest and lowest of the four means in 1969 were those of the trained schools in the two clusters. In Table 5-13 (test F), the highest and lowest means in that year are those of untrained schools. The only similarity between the outcomes of the two tests in 1969 was the fact that the mean of the trained schools in cluster De (corresponding to Ab) was positive and the mean of the trained schools in cluster Ed (corresponding to Ba) was negative.

It should not surprise us that there was some difference between the patterns in 1969. In that year, there were only two trained schools, and one went into each cluster. Patterns that rest on two tabular cells containing only one case each are bound to be fragile. It was no doubt a fine stroke of luck that enabled the 1969 pattern in Table 5-12 (test C) to take the same shape as the patterns in 1970 and 1972. Be that as it may, we must admit that our attempt at cross-validation gets no help from test F in 1969.

In 1970, however, test F not only gave us the same pattern that test C gave us, but test F gave us an even stronger version of it! The ordering of the four subgroups of schools on test C was:

TRND-Ab UNTD-Ba UNTD-Ab TRND-Ba,

and with cluster De corresponding to cluster Ab and Ed to Ba, test F gave us exactly the same ordering in 1970. But whereas the spread between the top and bottom subgroups on test C in 1970 was 0.99 standard deviations and rose to 1.59 in 1972, the spread on test F in 1970 was 1.93!

In brief, by 1970, when the larger numbers of schools in the four cells of the table presumably made the outcome more reliable, we found tests D, E, and F leading us to the same conclusion that tests A, B, and C has led us, and giving us even stronger deviations from the district's average with which to argue the case.

This gives us somewhat more confidence in our conclusions (1) that it is possible that organizational training improved responsiveness in schools where the staff believed that colleagues would persist in task-oriented communication even when it was emotionally stressful, and approved of this,* (2) that it is also possible that

---

* Here is a review of the evidence on which these conclusions rest. School means among trained schools were the highest on test C or F when means on A or D were the highest. In trained schools where means on test A or D were negative, means on test C or F were negative. Among untrained schools, some positive means on C and F also occurred at all ranges of A and D, respectively, as did negative means also. Furthermore, means of trained schools reached higher on test C than those of untrained schools, and means of untrained schools reached lower than trained schools on both C and F.

---

organizational training depressed responsiveness in schools where skill at communication during emotion was below average. Openness (tests B and E) had little to do with relations among communication, responsiveness, and training.

Bringing into View the Personal Abilities and Resources of Others

There remains one first-level skill for which we have some relevant questionnaire items. We have none bearing directly on the behavior of teachers in bringing out the resources of others, but we did administer some items in 1970 about the behavior of the principal. Some of the items seem to us to indicate ways the principal might draw out the abilities of staff and encourage others to do so. One of the items asks the question very directly:*

---

* This item and the others about the principal are taken from the "Educational and Professional Leadership" questionnaire of Gross and Herriott (1965).

Item 18. To what extent does your principal engage in the following activity: Maximizes the different skills found in his faculty?

( ) Never
( ) Almost never
( ) Occasionally
( ) Frequently
( ) Almost always
( ) Always

The means of trained and untrained elementary schools on this item in 1970 in Kent were as follows (a score of five stands for "always" and of zero for "never"):*

---

* To show visually the gaps in scores between some schools, we have arranged the schools over a scale of mean scores ranging from 4.2 to 2.0 with the possible scores being .2 apart. This shows, for instance, the large gap between school K12 and the next highest school, K06.

Untrained schools	Mean score	Trained schools
K09	4.2	
	4.0	K12
	3.8	
	3.6	
K06		
K03	3.4	K13 and mean of trnd schools
K04	3.2	K05
		K11
	3.0	
Mean of untd schs		
	2.8	
K10		
K01	2.6	
	2.4	
K07		
K08	2.2	
K02	2.0	

This pattern was typical of the results for the thirteen items in this group; tabulations of the data from the other twelve items appear in Appendix 5-I. Some of the other items were:

> To what extent does your principal engage in the following activity?
>
> -- Gives teachers the feeling that they can make significant contributions to improving the classroom performance of their students.
>
> -- Makes teachers' meetings a valuable educational activity.
>
> -- Treats teachers as professional workers.

In twelve out of the thirteen items, the difference between the means of the trained and untrained schools was about the same as that shown for item 18. In no case, however, was any difference statistically significant. The best we can say of these data is that there may have been a slight tendency for staff in trained schools to be more appreciative than staff in untrained schools of their principals' efforts to encourage them to be resourceful in their work -- at least in 1970.

Summary

In this chapter we have presented three studies assessing the effects of organizational training on interpersonal skills. Porter's (1972) study, based on the response of teachers and others to relevant questionnaire items, revealed that organizational training had effects on an individual's ability to deal with difficult and emotional communicative situations. The effects on individuals were not dramatic; the findings were in keeping with our theory that organizational training will have greater effect on subsystems than on individuals.

Bigelow (1971), using Flanders' interaction analysis and Schmuck's Classroom Life questionnaire, discovered that OD training for teachers can have beneficial effects on the interpersonal communication in their classrooms -- even when the training is not specifically aimed at changing student-teacher interaction. Evidence from Bigelow's study and from other research cited suggests that classrooms can become more attractive, rewarding, and productive after teachers undergo OD or other similar kinds of training.

In the final study described in this chapter, we looked at schools rather than individuals as the unit of analysis, and used nonmetric multidimensional scaling techniques to analyze the responses to our tests of communication, openness, and responsiveness. Our conclusions are (1) that it is possible that training can improve responsiveness in schools where skills of communication during emotion are good and (2) that it is possible that training produces poor responsiveness in schools where communication skills are below average.

These three studies suggest that organizational training does have certain effects on first-level communicative skills. In the following chapters we shall continue to examine the effects of training -- on first, second, and third-level skills.

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Mentioned on page 3.

Appendix 6-B. Procedures for calculating test scores.
Mentioned on pages 6, 10, 12, 13, 16.

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Mentioned on page 17.

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Mentioned on pages 6 and 8.

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Chapter 6

COMMUNICATION: CAN TRAINING HELP?

Wyant

(Final)

In small and relatively simple systems like most elementary schools in the U.S.A., the organizational functions depend heavily upon face-to-face communication. Using several tests of communication, this chapter will examine the effects of training for organizational development upon two kinds of elementary schools -- collaborative and noncollaborative. These tests of communication pertain predominantly to first-level skills, but, as we shall see, they also reach to some extent into the second and even third levels. The major findings of this portion of the Kent project are: (1) using tests different from those in Chapter 5, we find again that even the relatively brief interventions conducted during the Kent project had beneficial effects in some schools and (2) the schools showing the greater benefits were the schools that had received the greater number of hours of training. Indeed, schools with very little training showed deleterious effects. We shall also learn that there are several subtle facets of first-level and second-level communication within the simple descriptions we gave in Chapter 3. The story we shall tell here is substantially a condensation of the substudy carried out by Spencer Wyant (1974), then a member of the CASEA staff.

Communication as a Process and as a Training Goal

The quality of an organization's functioning depends to a large extent upon the quality of information shared by its members. In particular, the organization's members must be able to share valid and important information about goals, perceptions, and expectations as they orient themselves to one another and to the common task. Their ability to do so, in turn, derives partly from individual skill in communicating openly and clearly, partly from norms of giving constructive feedback and of sharing undistorted communication about important matters, and partly from the existence of organizational structures and procedures that expedite the flow of information to parts of the system where it is needed.

Improving the quality of communication was a major goal of the training events conducted by us and the cadre. All the interventions included work on developing basic communication skills and supportive norms within and among groups. Several training events included exercises such as "imaging" to increase the amount of shared, valid information between role groups. We described the importance of skillful communication in Chapters 3 and 4. We described some actual training events in Chapters 2 and 5 and their appendices.

Procedures

In this section we describe the hypotheses chosen, the selection of the schools used in this portion of the study, and methods of analysis.

Hypotheses and Variables

We believe that training for organizational development can improve communication within school staffs. Others have claimed that communication can be improved by rearranging the formal organizational structure of a school. In particular, it has been claimed that introducing a multiunit or team-teaching structure will enlarge and improve communication among staff members. The effects on communication of these two variables -- OD training and formal structure -- are the focus of this chapter.

Training for organizational development. The first independent variable was whether a staff had received OD training. By 1970, four Kent schools had received training; by 1972, seven elementary schools in Kent and one in Auburn had received training. Our prediction was that the trained schools would score higher on the criterion variables on tests that we devised than untrained schools.

As OD training goes, the interventions in Kent were relatively small; no school had more than four training events (three schools had only one each) and the average amount of training was just under 24 hours per school. In comparison, in another similar project CASEA provided 80 hours' training to a junior high school staff (see Schmuck and Runkel, 1970), and in yet another project six elementary schools each received an average of 90 hours of training and consultation over the course of a school year (see Schmuck, Murray, Schwartz, Smith, and Runkel, 1975). Table 6-1 gives a summary of training in the schools studied in the Kent project. For more detail, see Appendix 5-A.

Table 6-1. Training events for elementary schools in two districts from 1968 to 1972

		1968-1970		1970-1972		Total	
School	District	Events	Hours	Events	Hours	Events	Hours
K12	Kent	2	18	2	28	4	46
K11	Kent	2	15	1	24	3	39
K14	Kent			2	27	2	27
K15	Kent			1	22	1	22
K13	Kent	1	10	1	5	2	15
K02	Kent			1	14	1	14
A11	Auburn			1	14	1	14
K05	Kent	1	6	1	6	2	12
		6	49	10	140	16	189

Notes: This table does not include time spent in meetings of clients and consultants to plan events nor time spent in interviews, data feedback, or process consultation. Relatively little time was spent in these activities in comparison with the time spent in training workshops.

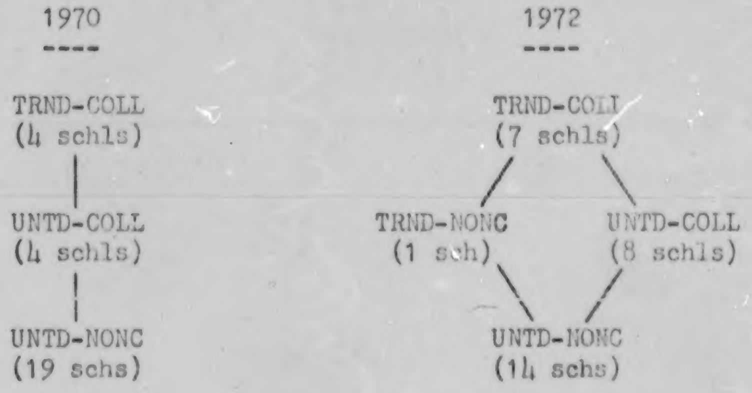
During 1968-70, CASEA provided the training in schools K05 and K11, the Kent cadre in school K13, and a combined CASEA-cadre team in school K12. During 1970-72, all training was provided by the Kent cadre.

Organizational structure. The second independent variable was the type of organizational structure. Each school was classified as "collaborative" (employing team teaching, multiunit, or differentiated staffing arrangements) or "non-collaborative" (employing self-contained classrooms) in structure. Our prediction was that collaborative schools would score higher on criterion variables than non-collaborative schools.

The criteria for classifying schools as collaborative or non-collaborative came from a checklist of features of the multiunit school developed by Packard and Carlson (1971). These features -- derived from the multiunit model developed by the Wisconsin Research and Development Center -- include: (a) a strong leadership team or "Improvement of Instruction Committee," (b) a sharply-differentiated unit leader position, and (c) stable, well-defined teaching teams to which all instructional personnel are assigned. Wyant obtained the information concerning these criteria through interviews with school and district personnel (for details, see Wyant, 1974). In no school were all the criteria fully satisfied, but all the schools we classify here as collaborative exhibited the essential characteristics in some form, and there were clear differences between those schools with collaborative structures and those without.

The two independent predictor variables -- training and collaborative structure -- were used to classify schools in a very simple facet design having four cells. The number of schools in the cells varied considerably; in the data of 1970, one cell (that of being both trained and non-collaborative) was empty. Our general hypothesis is diagrammed in Figure 6-1: if a symbol lies higher on the page than another, the prediction is that schools labelled by the upper symbol will score higher on any of our tests of communication than schools labelled by the lower symbol. In Figure 6-1 and hereafter, TRND stands

Figure 6-1. Predictions concerning communicative efficacy within elementary schools of three districts classified according to training and collaborative structure


1970
TRND-COLL
(4 schls)
UNTD-COLL
(4 schls)
UNTD-NONC
(19 schs)
1972
TRND-COLL
(7 schls)
TRND-NONC
(1 sch)
UNTD-COLL
(8 schls)
UNTD-NONC
(14 schs)

for trained schools, UNTD for untrained, COLL for schools with collaborative structure, and NONC for schools without. Appendix 6-A shows the classification of every school.

Data Collection

The unit of analysis in this chapter is again, as in Chapter 5, the individual elementary school as represented by the collective response of staff members to questionnaire items. The three districts had a total of 40 elementary schools in 1970 and 42 in 1972. We chose to use in this substudy only those schools (a) for which we had data in both 1970 and 1972, or (b) those which began operating between the 1970 and 1972 data collections (two schools in Kent and one in Auburn). The collection of schools studied in this chapter, then, totalled 27 in 1970 and 30 in 1972. This study is limited to data from 1970 and 1972 because the most substantial block of training for school staffs occurred between the 1970 and 1972 data collections. Sizes of schools and rates of return are shown in Table 6-2.

Communication Measures

The communication measures in this analysis are six multi-item tests. Three of the tests -- labelled Ia, IIa, and IIIa -- were available in both the 1970 and 1972 data. The three remaining tests -- Ib, IIb, and IIIb -- were available only in 1972. Each of the tests generated information about a different aspect of intra-staff communication. The titles and descriptions of the tests are given below.*

---

*After all the data from the questionnaires were in, Wyant selected the items he wanted to examine by the following procedure: A review of all questionnaire items produced approximately 50 directly related to communication processes. These 50 items were then divided into three clusters on a prima facie test of appropriateness. Each cluster was then subjected to a "first principal component" factor analysis computer program. On the basis of this analysis, the six tests were selected. For a more complete description of the selection, coding, and analysis of each item and test, see Wyant (1974).

Appendix 6-E contains an analysis item by item (not test by test) of the response in each Kent elementary school, in pools of trained and untrained Kent elementary schools, and in pools of all elementary schools in each of the three districts. Appendix 6-E omits items already displayed in Chapter 5. It also omits a few items we omitted for one reason or another from our preliminary examination of the functioning of items.

Appendix 6-B contains the items in full as well as the scoring details.

Table 6-2. Sizes and response rates of elementary schools in the substudy of Chapter 6

	Kent		Auburn		Fed. Way		Total	
	1970	1972	1970	1972	1970	1972	1970	1972
No. of schools	13	15	6	7	8	8	27	30
Mean staff size	33	28	22	20	24	24	28	25
Percent q'aires returned	71	72	81	94	58	72	69	76

Notes: In this table and elsewhere in this chapter, "staff" means teachers-and-others -- that is, teachers, teaching aides, assistant teachers, counselors, librarians, and other specialists located in the building. It excludes administrators, custodial, secretarial, and food service personnel.

Respondents were lost not only through failing to return questionnaires, but through two other causes. First, four and five percent of respondents, in the two years, skipped individual items. Second, technical considerations of somewhat different form of certain items in 1970 caused us to drop a few respondents in that year. These considerations are described more fully by Wyant (1974).

Tests for 1970 and 1972. All the tests with "a" in their labels consist of items about face-to-face communication. All these items, furthermore, pose situations in which the respondent can easily imagine his or her participation -- or in which the respondent has indeed participated. Except for items 1, 4, and 5 -- items we have already seen in Chapter 5 -- the items of the "a" tests ask the respondent's report of typical behavior in the staff meetings he or she attends.*

---

*We borrow all the items about meetings from Gross and Herriott (1965).

All these items, both the items about meetings and the others, deal with face-to-face, moment-to-moment, oral communication -- the very bed-rock, in our view, upon which all day-to-day operation, all coordination or lack of it, all success or failure in the school rests.

Test Ia: Communication during emotion; norms about sharing feelings and opinions

The respondent estimates colleagues' behavior in situations that call for open communication, such as making public personal pain and critical opinions, and intervening in an argument between two staff members (6 items).

We have given this test the same title as that of test A in Chapter 5 because of its strong similarity to that test. Indeed, it contains items 1 and 5 that were also components of test A. It also contains item 4, an item we used as part of test B on openness in Chapter 5. Item 4 qualifies equally well for test Ia in this chapter, however, because of its protagonist who "strongly disagrees" with another teacher.* The other three items of the test also concern communication infused with some emotion:

Item 18. People are afraid to be openly critical [in meetings] or to make good objections.

( ) This is very typical; it happens repeatedly.
( ) This is fairly typical; it happens quite often.
( ) This is more typical than not, but it doesn't happen a lot.
( ) This is more untypical than typical, though it does happen some.
( ) This is quite untypical; it rarely happens.
( ) This is not typical at all; it never happens.

All of the remaining items in tests Ia, IIa, and IIIa used the same alternative answers as item 18. We shall not repeat them. The other two items in test Ia were:

Item 19. People hesitate to give their true feelings about problems which are discussed.

Item 20. People give their real feelings about what is happening during the meeting itself.

Clearly, test Ia dealt with communicative skill at the first level described in Chapter 3: interpersonal.

---

*We do not take the view, fashionable in the social sciences some years ago, that an item should be given only one interpretation and be used in only one test. Two interpretations of an item can both be valid if respondents can find two aspects of it to which to respond -- and we believe this to be the case with item 4. We shall say more about this in Chapter 7.

Test IIa: Procedures in meetings

The respondent reports how typical are situations and events that indicate norms and procedures that facilitate or hinder the exchange of information in faculty meetings, such as discussion of alternative solutions to a problem, the distribution of members' participation, how well the group sticks to a topic, etc. (7 items).

Two items will give the flavor of the test:

Item 23. The same few people seem to do most of the talking during the meeting.

Item 24. There is a good deal of jumping from topic to topic -- it's often unclear where the group is on the agenda.

This test seems best described as reflecting a group skill; that is, a second-level skill resting on norms at faculty meetings that enable information to be brought out clearly, resources of members to be used, and so on. It corresponds directly to the skill of using "improved procedures at meetings" that we described as a second-level skill in Chapter 3.

As we have done here in the case of test IIa, we shall give only a few illustrative items for each test. All the items in all tests are shown in full in Appendix 6-B.

Test IIIa. Effectiveness in meetings

The respondent reports how typical are situations or events in faculty meetings that indicate productivity at the meetings, such as the clarity of decisions, acceptance of decisions, amount of participation in problem solving, and so on (13 items).

This test moves closer to the actual outcome of a meeting than test IIa. It has more to do with the way people in a meeting deal with a task than the way they deal with each other. This test deals more than does test IIa with norms that directly help to move problem solving along. It samples a kind of interpersonal communicative skill, but a very task-oriented skill that can only be brought into play if most or all the members of a problem-solving group (subsystem) join in its exercise. We might say that test IIa deals with *process* in a meeting while test IIIa deals with *content*. Most items in IIa deal with how a meeting is run, but most in test IIIa deal with how productive the meeting actually is. As examples of the content of test IIIa, item 28 asks whether the nature of a problem is thoroughly discussed, item 29 whether answers are proposed before the problem is understood, item 31 whether decisions are left vague, item 34 whether people really get involved in the meeting, and item 37 whether people feel very committed to carrying out the solutions arrived at by the group.

Tests for 1972 only. The "b" tests do not involve the respondent as intimately as do the "a" tests. The "a" tests, so to speak, ask the respondent to consider the school as a series of interpersonal or group situations in which he or she is at any minute likely to be swept up. The "b" tests, on the other hand, ask the respondent to look at the school as a system having certain shapes and qualities, and to tell us what those shapes and qualities are like, even though the respondent himself or herself may not make a strong contribution to those shapes and qualities. The "b" tests comprise a report on system (school) functions and their supporting structures: readiness to bring "variety" to view, channels and distribution of communication, the existence of opinions about school matters, and the like. In general, the "b" tests reflect "higher" skill levels than the "a" tests.*

---

*We are grateful to Max Abbott, Terry Eidell, and Roland Pellegrin of the early Program on Innovations at CASEA for items 45 and 47 through 51. The other items in the "b" tests were original with us.

Test Ib. Variety: initiation and reception of ideas and feedback

The respondent, in one pair of items, reports how many staff members are able to raise novel ideas, and how many staff members seem to welcome their efforts. The second pair asks about the ability of staff members to raise potentially embarrassing topics smoothly, and how these attempts are met (4 items).

To give more of the flavor, here is one of the items:

Item 41. Are there some people on the staff who come up with some really new and different ideas sometimes? About how many are there?

The content of this test reflects the first-level skill of bringing out the personal abilities and resources of members of the school so that they can be put to use. The test, however, does not assess the quality of this skill within pairs of persons; it asks the extent to which this skill is available to the school as a whole and how many people in the school welcome its exercise (see Appendix 6-B for other items). We classify this test as one lying at least at the second level, and possibly at the third. Often, bringing out resources requires opening up viewpoints and potential courses of action that have lain hidden because people have feared to touch the emotions they believe surround the ideas or courses of action. The four items in test Ib ask whether opening these "delicate" matters actually does happen in the school. Walter Buckley (1967) has spoken of an organization's potentiality for producing non-routine ideas and action as a "pool of variety" upon which it can draw to meet non-routine challenges. Borrowing his term, we are naming test Ib variety for short.

In general, our hypothesis is that second-level and third-level skills rest on the achievement of earlier skills. Also, most of the training we give deals principally with first-level skills. We expect collaborative structure and training to lift first-level skills above the average rather easily, but to have smaller effects on skills approaching the third level. And indeed, we shall see later in the chapter that the range of scores among groups of schools differentiated by amount of training and collaborative or non-collaborative structure is much less on test Ib than the range on the first-level test Ia.

> Test IIb. Linkages: networks and occasions for communication
>
> The respondent reports on the frequency and extent of his or her participation in communication with colleagues, the extent of his or her interdependence, and the frequency of occasions on which significant communication occurs (5 items).

These items ask about communication channels that might or might not exist in the school -- about networks or links that mediate communication about tasks. For illustration, here are two of the simpler items (the others, more complicated, appear in Appendix 6-B):

Item 46. In most schools, teachers have periodic meetings in some groups smaller than the entire faculty. These may be meetings of teachers of one grade, or of a unit, or of a department of some sort. Please name here the kind of small-group meetings that you attend regularly.... How often are these meetings usually held?

Item 48. Who are the persons, if any, whose jobs are so closely related to yours that you believe the two jobs must be performed collaboratively if either of you is to perform his work effectively? Please write names. If none, write "none."

We interpret this test as one that searches out the channels and occasions that exist in the school for clarifying communication throughout the school as a whole. The test assesses a second-level skill. The items ask about communicative opportunities in the school as a whole, but they do not go on to the third level to ask how successfully the school as a whole uses those communicative opportunities -- the channels and occasions.*

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*One of the items in this test also appeared in Chapter 5 as item 7 of test B on receptiveness.

Perhaps a brief explanation of our remarks above about "the school as a whole" will be helpful. It is true that asking a single person about jobs related to his or hers (for example) does not tell us about the school as a whole. However, our unit of study in this chapter, as in Chapter 5, is the school, not the individual. We made a score for each school by counting the number of names each individual gave in response to item 48 (for example) and then converting this raw score into a standard score. The standard scores of all the items in the test over all the individuals in the school were then summed to give a score on the test for a given school. As a result of this procedure, the score on test IIb for a school reflects the relative number of other persons (to continue with our example) with whom the average respondent in the school considers himself or herself to be strongly interdependent. The higher the average for the school, the more likely it is that the school contains channels and occasions in which many members participate. In this way, the average becomes an indicator of a characteristic of the school, and an indicator that is comparable between schools.

Test IIIb. Knowledge and opinion about faculty matters

The respondents report whether they have opinions about certain school matters, whether they believe the school needs new ideas in some areas, and whether they think it is important to coordinate classroom activities with other things (4 items).

The respondent who scores high on this test has opinions about what is happening in the school (items 49 and 50), believes the school needs new ideas to cope with some of the school's problems (item 52), believes others agree that the school does (the second part of item 52), and wants classroom activities to coordinate with other parts of the school's life such as extra-curricular activities, student council, PTA, or in-service training programs for teachers (item 51). The school that scores high has a lot of individual high-scorers in it.

Presumably (though we have not made a detailed analysis to be sure how exact this statement is), the high-scoring school distributes enough information to enough members so that a lot of them have opinions about what is happening in the school. Presumably too, the communication is open enough so that members talk about what parts of the school life need some fresh thought breathed into them, and this talking leads them to believe a good number of others agree with them about this. Finally, we assume that members' knowledge about what is happening throughout the school enables them to coordinate their classroom work with the rest of the school's program in an effort to make school life as a whole more meaningful for their students. All this implies the existence of norms in the school that support open sharing of important information and that encourage members of the school to reach out to one another to coordinate their work. Maintaining this much clarity of communication in the school, seeking this much collaboration in dealing with problems, and this much stirring of the "variety pool" -- all this certainly amounts to second-level skill. To the extent that this communication and coordination actually produce better ways of coping with problems and remaining flexibly adaptive, the skills rise toward the third level. On the other hand, only moderate or low scores on this test could indicate a lot of autistic opinionation, a lot of pluralistic ignorance, or a sheer lack of information on the part of a lot of isolated individuals.

In sum, the "a" and "b" tests have certain similarities and certain differences. The "a" tests contain the more personally involving items; the "b" tests have more the flavor of reporting on the communicative opportunities in the school as a whole. Probably the tests Ia and Ib are more alike on their faces than any other pairing between "a" and "b." We shall see another correspondence in Chapter 7, where we shall see how another member of the CASEA staff constructed a test of "variety" that shared items both with Wyant's test Ia and with Chapter 5's test A.

By assessing a number of facets of communication in elementary schools with a number of tests, we hoped to illuminate both the processes of communication in the schools and our ideas on how to assess them.* After a few more remarks about constructing the tests and the methods of analysis, we shall look at the data to see the extent to which they bore out our original notions.

Constructing Test Scores

The first step in achieving a score for a school on a test was to give weights to the possible answers to each item; these weights are shown in Appendix 6-B. The next step was to compute, for each item, its mean and standard deviation over all the elementary schools in the district in the given year. Using these statistics, each individual in each school was given the corresponding standard score on each item. Third, the mean of these scores was calculated over all items in the test and all respondents in the school. The result is substantially a standard score for the school;* this is the score we shall be discussing during the rest of this chapter. A complete list of standard scores for all schools and all tests appears in Appendix 6-C.

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*The factor analysis that Wyant used to winnow his items accomplished even more than help him select relevant test items. It confirmed our judgment that we had greatly improved our questionnaire in 1972. By the time we were ready to write the 1972 questionnaire, we believed we had omitted one or two facets of communication in previous versions, so we added some new items. Wyant's factor analysis (including all items that concerned communication regardless of year they appeared in the questionnaire) produced a listing of 13 items with high loadings on a second factor -- and 10 of these items were among those we had added to the 1972 questionnaire. This finding will be discussed again briefly in Chapter 13.

Tactics of Data Analysis

The overall scheme for analysis of data was as follows. Each school was assigned to a "pool" (i.e., group) based on its classification on the two independent variables of training and collaborative structures; there were three pools for 1970 and four pools for 1972 (see Figure 6-1). The standard score for each school in each pool on each test was listed, and scatter plots of the distributions of scores were drawn. Means and standard deviations for each pool for each test were computed. A one-way analysis of variance (fixed effects model) was performed for each test to determine whether significant differences among means of pools existed. Next, t tests were preformed to test for significant differences between the means of (a) schools trained and collaborative versus schools untrained but collaborative (TRND-COLL versus UNTD-COLL), (b) schools untrained but collaborative versus schools untrained and not collaborative (UNTD-COLL versus UNTD-NONC), and (c) the school trained but not collaborative versus schools untrained and not collaborative (TRND-NONC versus UNTD-NONC).

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*A standard score expresses the status or location of a school within the distribution of all schools within its own district. Two considerations prompted the use of this procedure. First, it allows for the combination of questionnaire items that had differing scales and number of scale points. Second, it permits examination of the performance of a school in relation to the performance of other schools subject to the same district policies, norms, and the like.

Kendall's tau, a rank correlation coefficient (Siegel, 1956, pp. 213-223), was computed for trained schools in Kent on each test to determine the degree of association between amount of training received and rank-ordering of test scores for these schools.

Review of the Design

To recapitulate, the essential features of this substudy are as follows: (a) the focus of the study is on comparing the effects of training for organizational development with the effects of rearrangements in the formal organizational structure of elementary schools; (b) the subjects of the study are 27 elementary schools in 1970 and 30 schools in 1972, some of which had OD training, some of which had a collaborative organizational structure, some both, and some neither; and (c) for each school in each year, a series of test scores was constructed by combining individual responses to questionnaire items into a single index representing the school's score on a particular aspect of intra-staff communication.

The relative standing of trained versus untrained schools and of collaborative versus non-collaborative schools on outcome measures were analyzed in a variety of ways to be described below. The most interesting and useful results appeared as we shall see, when effects of varying amounts of OD training were considered.

Results

We shall first examine the effects of the independent variables (training and structure) separately and then in combination for each set of tests in each year. After that, we shall consider the effects of different amounts of training.

Effects of Training

In 1970, four schools (all in Kent) were trained and 23 were not, and in 1972, eight schools (seven in Kent and one in Auburn) were trained and 22 were not. The results shown in Table 6-3 below provide only moderate support for the hypothesis that trained schools would score higher than untrained schools.

Table 6-3. Mean standard scores of trained and untrained elementary schools in three districts on six tests of communication administered in two years

Year	Trained or untrained schools	Tests Ia	IIa	IIIa	Ib	IIb	IIIb
1970	TRND	.16	-.11	.17			
	UNTD	-.01	.04	.00			
1972	TRND	.02	-.02	.04	-.05	.21	.04
	UNTD	.00	.02	.00	-.00	-.11	-.02

In both 1970 and 1972, the mean of trained schools exceeded the mean of untrained schools on tests Ia and IIIa, but fell below the mean of untrained schools on test IIa. This pattern did not appear on "b" tests. The mean of trained schools was slightly below the mean of untrained schools on test Ib, considerably above it on test IIb, and slightly above it on test IIIb. These results tentatively suggest that overall (ignoring possible effects of different amounts of training and of different organizational structures), training apparently improved communication in school staffs on the first-level test Ia (communication during emotion), on the second-level test IIIa (effectiveness in meetings), and on the second-level test IIb (maintaining communicative linkages). Judging from the second-level test IIa, trained schools apparently gave shorter shrift to procedures in meetings than did untrained schools. Finally, training seemed to make little difference, or perhaps caused a slight decrement, on the third-level test Ib (using a variety of resources) and on the third-level test IIIb (shared perceptions of faculty matters). Overall, the strength of these results (amount of deviation from the district mean) is not impressive.

Effects of Collaborative Structure

In 1970, eight schools (four in Kent, one in Auburn, and three in Federal Way) had the collaborative organizational structure, and in 1972 fifteen schools (six in Kent, four in Auburn, and five in Federal Way) had this structure. The results of collaborative versus non-collaborative organizational structure, shown in Table 6-4 below, are more clear than those for training: the mean of collaborative schools always exceeded the mean for non-collaborative schools.

Table 6-4. *Mean standard scores of collaborative and non-collaborative elementary schools in three districts on six tests of communication administered in two years*

Year	Collaborative or non-collaborative schools	Tests Ia	IIa	IIIa	Ib	IIb	IIIb
1970	COLL	.26	.05	.15			
	NONC	-.09	.00	-.03			
1972	COLL	.07	.01	.00	.02	.17	.03
	NONC	-.07	.00	-.02	-.04	-.22	-.02

A similarity appears between Tables 6-3 and 6-4 on which we should not put much importance. In both tables, the largest positive differences (that is, differences in favor of trained schools in Table 6-3 and in favor of collaborative schools in Table 6-4) are unambiguously those on tests Ia, IIIa, and IIb. It would be tempting to conclude that training and collaborative structure affected communication in similar ways. But some of this similarity is due to the fact that some schools were both trained and collaborative, and the numbers of schools in the various independent conditions were not balanced -- see the count of schools in Figure 6-1. We shall learn more about the similarities and differences in effects of the two independent variables later on when we examine their relative "staying power" and the different effects of different amounts of training.

Overall, these results provide strong support for the hypothesis that collaborative schools would score higher than non-collaborative schools. That is, it appears that rearrangement of the formal organizational structure did have a favorable effect on intra-staff communication.

Effects in 1970 of Training and Structure Combined

In 1970, four schools, all in Kent, were both trained and collaborative (and are labelled here TRND-COLL); four schools, one in Auburn and three in Federal Way, were untrained but collaborative (UNTD-COLL); and the remaining 19 were neither trained nor collaborative (UNTD-NONC). There was no school that was trained but not collaborative in 1970.

The predicted ordering of mean standard scores was upheld only on test IIIa (effectiveness of meetings) in 1970, and even here, the differences were not statistically significant. UNTD-COLL schools were the highest pool on test Ia and test IIa, while TRND-COLL schools were second on test Ia and lowest of the three on test IIa. The differences among means of pools were statistically significant for test Ia and test IIa. Appendix 6-D shows the actual means of all pools.

To summarize the results in 1970, the dominance of UNTD-COLL schools over both TRND-COLL and UNTD-NONC schools -- especially on the first two tests -- seems clear. Within collaborative schools, training seems to have actually depressed the scores of the trained schools.

In 1970 the most highly-trained school had only 18 hours of training, and the average for the four schools was less than 13 hours of training. Evidence to be presented later strongly suggests that this is an insufficient amount of training to improve communication among the staff of a school -- in fact, that too little training can actually hinder some kinds of communication.

The two tests on which trained schools scored lower than untrained schools dealt with the sort of perception that may be affected by the higher levels of aspiration and by the greater clarity about existing problems that is often brought about by training. Test Ia asks the respondent to estimate colleagues' actions in situations that call for openness in communication and to estimate how free colleagues feel to express feelings and opinions in staff meetings. Test IIa asks the respondent to report how typical are events that help or hinder communication in staff meetings; for example, the exploration of alternate solutions to problems, deadlocks between factions, dominance of discussions by a few people, and jumping from topic to topic. These are the sorts of impediments that are usually made public in the early stages of organizational development training; one of the goals of OD interventions is to make problems public so that staff can act on them rather than expend energy to keep them hidden. So it may well be that the relatively small amount of training received by these schools was sufficient to make the problems more apparent than in untrained schools, but the amount of training was insufficient to make progress in working on the problems.* In trained schools, in other words, the aspiration small group meetings. A more reasonable measure would have been the time-per-individual spent in meetings of various kinds (compare Smith, 1972).

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*Scores of both trained and untrained collaborative schools were somewhat depressed by a single item about the length of staff meetings: staff meetings in collaborative schools were considerably shorter than those in non-collaborative schools. It appears that in collaborative schools these meetings were short events to disseminate information, while the work of planning and problem solving was carried out in meetings of subgroups such as teaching teams (see Schmuck, Murray, Schwartz, Smith, and Runkel, 1975). Collaborative schools of both types scored high on test IIb, which included an item about the frequency of

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would be higher concerning exactly these kinds of skill than in the untrained schools, and the disappointment at not achieving a firm improvement (when training was too brief) would be greater. The disappointment might cause a school with a small amount of training to report more communication problems than a school with no training. This interpretation is buttressed by the results we shall see later concerning schools that got larger amounts of training.

Effects in 1972 of Training and Structure Combined

In 1972, seven schools (six in Kent and one in Auburn) were both trained and collaborative, one school in Kent was trained but not collaborative, eight schools (three in Auburn and five in Federal Way) were collaborative but not trained, and the remaining 14 schools were neither trained nor collaborative. Our prediction was that the mean of TRND-COLL schools would surpass the means of the other three groups, and that the means of TRND-NONC and UNTD-COLL would surpass that of UNTD-NONC.

The predicted rank-ordering did not occur on any "a" test in 1972 (though it did occur on test IIIa if one omits the single TRND-NONC school), and no test showed statistically significant differences. A comparison of tests in 1972 with the same tests in 1970, though, does show some patterns that were similar between the two years. First, the order of pools (omitting TRND-NONC) -- UNTD-COLL followed by TRND-COLL, with UNTD-NONC lowest -- was identical on test Ia in both years; and the order TRND-COLL followed by UNTD-COLL, with UNTD-NONC lowest, was identical on test IIIa in both years. There was a reversal between UNTD-COLL and UNTD-NONC on test IIa from 1970 to 1972, but TRND-COLL was lowest on test IIa in both years.

Second, the mean of TRND-COLL pool does not fit the predicted pattern either in 1970 nor in 1972, but it had the same pattern in both years: its mean was highest on test IIIa (effectiveness in meetings), slightly lower on test Ia (communication during emotion), and considerably lower (negative, in fact) on test IIa (procedures in meetings). In short, the average effect of training in all trained schools seemed to be moderately positive on effectiveness of meetings and communication under emotion (the highest mean of TRND-COLL was only .17 in 1970) and negligible or even slightly negative on procedures in meetings.

Third, the mean of the UNTD-NONC pool followed the same pattern in 1970 and 1972 -- highest on IIa (procedures), next on IIIa (effectiveness) and lowest on Ia (emotion). It would be better, however, to speak of the UNTD-NONC pool as least low on test IIa instead of "highest," and so on; UNTD-NONC actually had negative means on four of the six testing instances, and only barely touched the positive in the other two.

There were also interesting differences between 1970 and 1972. First, the highest mean achieved by UNTD-COLL on any "a" test in 1972 was below the lowest mean this pool showed in 1970. This result strongly suggests a deterioration over the two years in the effects of collaborative organizational structure on these kinds of communication.

Second, the differentiation among pools was consistently greater for all "a" tests in 1970 than in 1972. No difference among pools of schools was statistically significant in 1972, whereas among untrained schools, the collaborative were significantly higher than the non-collaborative on two tests in 1970. This result will be discussed at greater length in a later section of this chapter.

The results among the "b" tests in 1972 require little discussion. Two features are worth mentioning. First, the schools had the same rankings on test Ib as they did on test Ia in 1972. Second, test IIb was unusual in that it alone among the tests in 1972 produced a strong differentiation among schools.*

We end this section by summarizing two features of the comparison between 1970 and 1972. The first is that neither in 1970 or 1972 did the trained schools score better on these tests on the average than untrained schools. Trained schools of both kinds of organizational structure surpassed untrained schools on only two of six tests in 1972; similarly, they surpassed untrained schools on one of three tests in 1970. Among untrained schools, the mean of collaborative schools exceeded that of non-collaborative schools on five of six tests in 1972 -- test IIa was the exception. But the dominance of collaborative schools over non-collaborative schools was not as great in 1972 as in 1970; that is, differences between the mean scores of the two untrained pools were smaller in 1972 than in 1970, with the exception of test IIb.

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*This is true especially if one omits TRND-NONC: the performance of TRND-NONC is difficult to interpret since it contains only one school.

Second, the ordering of pools on "a" tests remained relatively stable from 1970 to 1972, suggesting a pattern of the relative strengths of the two independent variables. Effects of collaborative organizational structure were apparently strongest on test Ia; this test measures the least extensive kind of effects, namely characteristics of individuals and groups that are not necessarily subsystems. In contrast, effects of organizational training were apparently strongest on the test we had originally thought would be the hardest, test IIIa on effectiveness in meetings, which measures aspects of communication that are presumably more distant from the input of each independent variable and which require more large-scale action by a larger proportion of the total faculty than do the other tests. Test IIa (procedures in meetings) produced the least discrimination among pools in both years, and it appears that neither independent variable had a strong effect on this test, which contains items about procedures in faculty meetings that help or hinder communication and interdependent action.

As expected, because of presumed fading of effects, differences among all pools of schools were much smaller in 1972 than in 1970, and the dominance of untrained collaborative schools over other pools was not nearly as great in 1972. In fact, the highest mean score attained by this pool on any test in 1972 was lower than the lowest mean score it attained in 1970. This result strongly suggests that effects of collaborative structure were waning and that the quality of communication in these schools will in time sink back to the level of communication in schools that were not collaborative.

We conclude that the relatively small amounts of organizational development training received by the eight schools were not sufficient to elevate their scores above those of untrained schools, and in fact depressed the scores at least of some of the trained schools on the majority of tests.

We shall now, however, look at the relation between the amount of training received and the scores on the criterion measures, and we shall discover some much stronger effects of organizational development training.

Rank-Ordering of Trained Schools

The eight trained schools received amounts of training that ranged from a high of 18 hours to a low of six hours in 1970, and from 46 hours to 12 hours in 1972. The amount of training received turned out to be related to performance, and the association between amount of training and rank on each test was stronger in 1972 than in 1970. Though positive, the association between amount of training and test score was very small in 1970, and we shall not take space here to tabulate the actual numbers.

Turning now to the data for 1972, Table 6-5 shows the amount of training given each elementary school in Kent, the rank-placement of the school on each test in 1972, and the index of association, Kendall's tau,* between amount of training and the rank order on each test. Clearly,

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* Kendall's tau expresses the degree of association or correlation between two rank-orders (see Siegel, 1956, p. 214). This analysis used schools in Kent only, since the standard scores express each school's position within the distribution of schools in its own district. Introducing the one trained school from Auburn into the analysis would bring in a second distribution against which that school's standard scores were computed, and that school's relative standing with the Kent schools would be next to meaningless.

Table 6-5. Rank orders of elementary schools in Kent in 1972 on amount of training and on each of six tests of communication

School	Hours of trng	Ranks on tests					
		Ia	IIa	IIIa	Ib	IIb	IIIb
K12	46	1	1	1	1	1	3.5
K11	39	2	2	3	2	2	1
K14	27	3	3	2	3	4	3.5
K15	22	7	7	7	7	3	5
K13	15	4	6	5	4	7	7
K02	14	5	5	6	5	5	2
K05	12	6	4	4	6	6	6
Kendall's tau		.71*	.48*	.43	.71*	.71*	.38

* Statistically significant at $p < .05$. Tests IIIa and IIIb did not produce results that were statistically signigicant.

the association between amount of training and rank on the tests was strong in 1972. Four of the six taus were significant, and *all* the 1972 taus were higher than any of the 1970 taus. The latter finding suggests that the training in 1972 was beginning to reach levels at which the larger amounts had significantly greater effects on the communication tests than the smaller amounts.

There was also a relation between the amount of training and gain on test scores. In analyzing gain, Wyant used absolute test scores, not standard scores. The absolute score expressed each school's performance as a percentage of the maximum possible score attainable on a test. The relation between amount of training and gain in percentage of possible score was as follows. The school with the most training in 1970 (K12) improved its score on all three "a" tests from 1970 to 1972; the school with the second most training (K15) improved on two tests; the school with the third most training (K13) improved on one test; and the school with the least training (K05) improved on no test. This outcome suggests that one test might be more "difficult" in some sense than another. The evidence on difficulty, however, is mixed. We shall discuss this point again in the section below on "Levels of Communicative Skill." See Wyant (1974) for further details.

Schools with Greater and Lesser Amounts of Training

We saw in Table 6-5 a rather good separation between the three elementary schools in Kent that had received the most training and the other four. On four of the six tests in 1972, schools K11, K12, and K14 were the three top-scorers. On the other two tests, two of these three schools scored among the top three. Since these trained schools in Kent clustered themselves this strongly on the six tests, Wyant went on to examine the mean standard scores of the collaborative schools with the greater amounts of training (K11, K12, K14), of those with lesser amounts (K05, K13, K15), and of those in Kent with no training at all (all others). Table 6-6 shows the means on all tests of these three groups of schools. The table contains no non-collaborative schools.

Table 6-6. *Mean standard scores of collaborative elementary schools in three districts on six tests of communication in two years, categorized by amount of training*

	1970		
	Ia	IIa	IIIa
1. Greater training (15 to 18 hours)	.28	-.10	.34
2. UNTD-COLL (no hours)	.36	.21	.14
3. Lesser training (6 to 10 hours)	.04	-.12	-.01

	1972		
	Ia	IIa	IIIa
4. Greater training (27 to 46 hours)	.26	.18	.40
5. UNTD-COLL (no hours)	.10	.01	.02
6. Lesser training (12 to 22 hours)	-.11	-.13	-.18

	1972		
	Ib	IIb	IIIb
7. Greater training (27 to 46 hours)	.24	.40	.14
8. UNTD-COLL (no hours)	.06	.12	.03
9. Lesser training (12 to 22 hours)	-.19	-.08	-.09

Comparing collaborative schools that received between six and 22 hours of training (lines 1, 3, 6, and 9 in Table 6-6) with those that received no training (UNTD-COLL), we see that communication in the trained schools was better only in the case of test IIIa in 1970 (line 1), but worse in the other eleven instances. In contrast, when we compare schools that received between 27 and 46 hours of training (lines 4 and 7) with those that received none,* we see that the communication in these schools with the greater amounts of training was *better in every one* of the six instances. Furthermore, on two of these six tests (namely, IIIa and IIb in 1972), the means of the schools with 27 to 46 hours of training exceeded all the UNTD-COLL means in the entire table, regardless of test or year. In other words, somewhere between zero and approximately six hours, training began to have a deleterious effect on communication in collaborative schools. Then, between 22 and 27 hours, training began to have facilitating effects on communication in collaborative schools.

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* Means of the UNTD-NONC schools can be seen in Appendix D. They were lower than the means of UNTD-COLL schools in eight of nine instances. In contrast, means of the UNTD-NONC pool were lower than the schools with the lesser training only in three of nine instances.

In Table 6-6, we see again the way scores changed between 1970 and 1972. Comparing the effects of more than 27 hours of training (line 4) with the effects of less than 18 hours (line 1), we note that the 1972 means were higher on tests IIa and IIIa, though not on test Ia. The contrast with UNTD-COLL schools is sharp when we look at lines 2 and 5, the means of UNTD-COLL schools went *down* considerably on every test. The means of the schools with the lesser amounts of training followed suit (lines 3 and 6); all three means went down between 1970 and 1972 despite the fact that the means of the low-trained category had already been lower than the means in the other two groups in 1970.

It is also interesting to compare the "a" tests with the "b" tests in 1972. Within each category of schools (compare lines 4 and 7, for example), the range of means among the "a" tests is remarkably close to the range among the "b" tests. In fact, in no instance does the range of one category of schools overlap the range of another category; this is true between "a" and "b" tests as well as within them!* In the logic of

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* For example, the range of schools with the greater amounts of training on the "a" tests (line 4) is .18 to .40. This does not overlap with the range of UNTD-COLL schools (line 5) on those tests -- .01 to .10. Neither does it overlap with the range of UNTD-COLL schools on the "b" tests (line 8) of .03 to .12. And so on.

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the multitrait-multimethod paradigm, the "a" tests and the "b" tests are helping to validate each other.*

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*For more information on the multitrait-multimethod paradigm, see Campbell and Fiske, 1959.

Deleterious Effects of Too Little Training

It was clear in Table 6-6 that the schools with the lesser amounts of training produced almost all the negative means on the communication tests. The means of the untrained collaborative schools, in contrast, stayed in the positive in all instances. The deleterious effects of too little training (compared to no training at all) become more clear if we rearrange the data. Wyant divided trained collaborative schools into four categories:

- -- schools with the lesser amounts of training (mean of 8.0 hours) in 1970,
- -- schools with the lesser amounts of training (mean of 15.8 hours) in 1972,
- -- schools with greater amounts of training (mean of 16.5 hours) in 1970, and
- -- schools with the greater amounts of training (mean of 37.3 hours) in 1972.

Wyant subtracted the mean of collaborative schools with no training at all from the means of these four groups on the "a" tests, obtaining four deviations from the untrained but collaborative state. These deviations from the untrained baseline are tabulated in Table 6-7 (see Wyant, 1974, for more detail).

Table 6-7. *Deviations of means of collaborative elementary schools having different amounts of training (TRND-COLL) from the means of collaborative schools having no training (UNTD-COLL)*

	Mean hours of training			
Test	8.0	15.8	16.5	37.3
IIIa	-.15	-.20	.20	.38
IIa	-.33	-.14	-.31	.16
Ia	-.32	-.21	-.08	.17

Looking at the four columns of three deviations each in Table 6-7, it is easy to see that scores on all three tests were depressed (using the mean of UNTD-COLL as a baseline) by the smaller amounts of training, but went into the positive or profit side of the ledger when amounts of training became adequate. And we see again (because we have merely rearranged the same data) that the test that required the least amount of training to show a profit was test IIIa on effectiveness of meetings. This is an encouraging result, because we have found over and over that school staffs are quick to appreciate improved effectiveness in their meetings. This kind of profit frequently encourages them to ask for more training to reach further organizational goals.

Apparently, small amounts of training -- between six hours and approximately 22 hours -- merely serve to bring problems to the surface and to make staff members more cognizant of the problems that presumably exist in all schools; this amount of training is not sufficient to enable a staff to deal with the problems constructively. One of the goals of organizational development training is to bring into public cognizance, where they can be consciously dealt with, interpersonal conflicts, miscommunication, and other problems that are usually hidden. Apparently, small amounts of training successfully make these problems public -- and may also raise staff members' aspirations as they glimpse the more satisfying ways of interacting demonstrated in the training -- but do not help a staff resolve them. In contrast, at some point between approximately 22 and 27 hours of training, the training starts to be effective in helping the staff devise new patterns of interaction that facilitate open and constructive communication of valid and important information.

At CASEA, we had for some time held the opinion that small amounts of training have the effect described above, but this study is the first in which any of us obtained some quantification of the opinion. With the results of this study, we may now have some confidence about stating to clients a minimum time investment that has reasonable promise of making organizational development training pay off in terms of improved communication and other indicators of organizational effectiveness.

In practical terms, this result means that the isolated two-day workshops that are common in laboratory training for organizational development will probably have moderately destructive results. Assuming that the typical day of training is six hours long, these findings indicate that at least four days of training (24 hours) is necessary, and that a full five-day week (30 hours) or more is strongly preferable. Beyond that, follow-up work in the form of process consultation or additional laboratory training is also highly desirable; for examples and discussion within another project, see Schmuck, Murray, Schwartz, Smith, and Runkel (1975).

To summarize, it seems fairly clear that collaborative organizational structure does improve communication among a school staff, at least for a short time after the structure is adopted, but that these effects can usually be expected to diminish quickly. Training for organizational development likewise improves communication among staff members of a school, but only after a critical number of hours of training -- something between 22 and 27 hours -- has been surpassed. Of course, the threshold value will no doubt be different in schools with characteristics different from those in the three districts we studied in this project. Some might require fewer hours to show a profit and some might require more. In Chapter 7, we shall discuss conditions of readiness which, when not present, can require special preparation before training proper should even be begun.

In general, while effects of collaborative organizational structure appeared to wane over time and were less strong in 1972 than in 1970, effects of training were stronger in 1972 than in 1970. This result apparently is due to the additional training received between 1970 and 1972. Three schools in 1972 had received 27 hours of training or more, whereas in 1970 no school had received more than 18 hours of training.

Decline of Communication in Collaborative Schools

We have seen evidence that collaborative schools showed some early improvement in communication but then regressed, falling close to the mean of the district in 1972. Wyant found additional data that echoed the pattern. The four untrained collaborative schools in 1970 were joined in 1972 by four others that adopted this structure between the two years. The schools that changed organizational structure between 1970 and 1972 improved on every test, while the established schools declined on all three tests. Further, the schools that changed structure between the two years performed very much like trained collaborative schools and very little like untrained collaborative schools (see Wyant, 1974, for details). One might speculate that there is a period of approximately two years during which effects of a change in organizational structure are strongest. It may be that it takes a year or so for the staff of a school to adjust to the new structure and make it work, while after two or three more years tensions and conflicts produced by the new mode of operation begin to work against the good results achieved earlier.

The Most Highly Trained School

Because of the natural variation in events and personnel from year to year, it is to be expected that schools will fluctuate on all measures even without special influence such as training for organizational development or an attempt to institute collaborative structure. The remarkable school is one that maintains high scores over several different measures or over successive years or (especially) both. In this respect, no other school of any classification matches the record of school K12, the most highly trained school.

School K12's standard scores ranked first among those of its own pool of trained collaborative schools (TRND-COLL) on eight of the nine testing occasions. No other school maintained this high ranking over tests and years within its own pool. School K12 appeared among the highest five schools of any classification on eight of nine testing occasions, a frequency of appearance among the top five greater than that of any other school, and K12 was the very highest school on four of the six tests in 1972. Finally, the school was one of only three to improve their performance on all three "a" tests from 1970 to 1972.

Levels of Communicative Skill

In describing Wyant's six tests, we characterized each by the level of communicative skill of which it seemed to be an indicator. In Chapter 3, we postulated the lower-level skills to be necessary supports for the higher-level skills. An implication is that the first-level skills will show a rise before skills of the second and third levels. A further implication is that schools having high scores on both higher-level and lower-level skills will be easy to find, but schools having high scores on higher-level skills but low scores on lower-level skills will be rare. But we have few schools to count, we are not sure how high is "high" or how low is "low," and we do not know how wide are the errors in our scores that could cause us to mistake an actual low score for a higher one or vice versa. A simpler prediction to test, though a weaker one, is that the mean score of the untrained-collaborative pool of schools on test Ia (first level, concerning communication under emotion) will be higher than the mean scores of that pool on test IIa (second level, concerning procedures in meetings) or test IIIa (second level, concerning effectiveness in meetings) in 1970. Similarly, we predict that the TRND-COLL schools with the greater amounts of training will show the same pattern in 1970 among the three tests.*

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*In this discussion, we shall not focus on the relative levels of the TRND-COLL schools with the lesser amounts of training nor the UNTD-NONC schools. We have already made it clear that the pool with the lesser training fell always below the UNTD-COLL pool, and into the negative in eight instances out of nine. That is all we need to remember here about the schools with lesser training. Finally, when we have mentioned three of these four categories of schools, we have substantially exhausted the degrees of freedom, because these are standard scores. This is true for all practical purposes in 1972, too, even though there the four categories neglect one school -- K02, the lone school in category TRND-NONC.

Extracting from Table 6-6 the means for the UNTD-COLL pool of schools in 1970, we have:

Table 6-8. Mean standard scores of the UNTD-COLL pool on the "a" tests in 1970

Test Ia:	.36
Test IIa:	.21
Test IIIa:	.14

The three means listed above bear out the prediction; the mean on the first-level test (Ia) is considerably higher than the means on the two second-level tests. Among the TRND-COLL schools with the greater amounts of training, however, our prediction does not fare as well:

Table 6-9. Mean standard scores of the pool of collaborative schools with the greater amounts of training on the "a" tests in 1970.

Test Ia:	.28
Test IIa:	-.10
Test IIIa:	.34

In Table 6-9, we see that the mean of the more highly trained schools on test Ia was higher than that on test IIa, but not higher than that on test IIIa.

Among the means for 1972, we know from previous tables that we shall discover that the means of the UNTD-COLL pool have dropped back toward the mean of the district. The result is that the means of the three tests will be compressed into a smaller range, and random errors will make it unlikely that we shall find the same pattern among the three "a" tests that we found in 1970. However, when we extract the means of the UNTD-COLL pool on the "a" tests in 1972 from Table 6-6, we discover that the predicted pattern did remain, even though the means on the two second-level tests fell to points barely distinguishable from the district mean:

Table 6-10. Mean standard scores of the UNTD-COLL pool on the "a" tests in 1972

Test Ia:	.10
Test IIa:	.01
Test IIIa:	.02

But the TRND-COLL schools with the greater training again fail the prediction, showing the same profile they showed in 1970:

Table 6-11. Mean standard scores of the pool of collaborative schools with the greater amounts of training on the "a" tests in 1972.

Test Ia:	.26
Test IIa:	.18
Test IIIa:	.40

We might note once more that the UNTD-COLL pool went down on all three of these tests from 1970 to 1972, whereas the schools with the greater training stayed about the same on test Ia and went up on the two second-level tests.

So far, the untrained collaborative schools (UNTD-COLL) have borne out the prediction about the relative difficulty of levels, but the schools with the greater training have not. Furthermore, the schools with the greater training even failed to support a second-order prediction; namely, that scores on second-level tests would show more "fading" between years. We hypothesized this because our training was aimed primarily at the first level and because we thought the change in second-level scores might be only a temporary artifact of collaborative structure. However, when we look at the changes in means of the pool of schools with the greater training, we see that the second-level tests did not fade at all; they increased! Of course, we should remember that these schools received additional training between 1970 and 1972.

Table 6-12. Changes in mean standard scores of the pool of collaborative schools with the greater amounts of training on the "a" tests from 1970 to 1972

Test Ia: -.02
Test IIa: .28
Test IIIa: .06

We can now try our prediction against the "b" tests. Very briefly, they were test IIb (second level, concerning maintaining communicative linkages), test Ib (third level, concerning maintaining access to variety), and test IIIb (third level, concerning knowledge and opinion about faculty matters). Looking first at the UNTD-COLL pool, we find again that this pool of schools supports our prediction; the mean on the second-level test (IIb) was higher than the mean of either of the third-level tests:

Table 6-13. Mean standard scores of the UNTD-COLL pool on the "b" tests

Test IIb: .12
Test Ib: .06
Test IIIb: .03

The support to the prediction given by the UNTD-COLL pool was consistent, but not strong. The departures of the means in Table 6-13 from the district's average were small; the range of the standard-score means on the "b" tests was about the same as the range of this pool on the "a" tests in 1972 (see Table 6-10).

Turning now to the pool of schools with the greater amounts of training, we come upon a surprise; for the first time, this pool supports the prediction, and strongly!

Table 6-14. Mean standard scores of the pool of collaborative schools with the greater amounts of training on the "b" tests

Test IIb:	.40
Test Ib:	.24
Test IIIb:	.14

This series of results should not surprise us too much. We saw in Chapter 5 that the relation between training and communication variables was an interactive one, not a simple additive one. That is, as training increases there is no simple increase on scores on communication variables. The same sort of complexity seems to be showing up here. The collaborative schools without training substantiated our simple prediction in every instance, though weakly in 1972. The schools with the greater amounts of training, however, failed to show the predicted pattern among the "a" tests. In both years, the mean of the more highly trained schools was highest on the second-level test IIIa on effectiveness in meetings. In fact, though the means of the UNTD-COLL pool declined from 1970 to 1972, the mean of the more highly trained schools on test IIIa in 1972 (namely, .40) was higher than the mean of the UNTD-COLL pool on test Ia in 1972 (.36). Then the more highly trained schools again gave a high mean (.40) on the second-level test among the "b" tests; namely, on test IIb. Since its means on the third-level tests were lower than its mean on test IIb, the pattern supported our prediction.

But these results among the more highly trained schools may have nothing to do with the ordering of skills assumed in our prediction. It may be that our levels are ill-conceived, or that they fit untrained schools but not trained schools. Still another possibility is that our labels do apply both to trained and untrained schools, but their visibility differs. That is, it may be that after a school receives enough training, its members become sensitive to the changes in their second-level skills and report them fully when questioned, but at the same time acquire a high level of aspiration about their first-level skills that causes them to down-grade their lower-level skills when asked about them. This combination of processes could produce the patterns we have seen. Perhaps the entire set of processes would repeat at the higher level if we were to study schools that were acquiring strong third-level skills. If this were to happen, it would then appear that our predictions were upside-down, because the highly-skilled schools would be getting their highest scores on the third-level tests and their lower scores on the lower-level tests! In brief, there could be subtleties in the processes that our simple tests may not be catching. Wyant (1974) went into this matter of the difficulties of the different tests more thoroughly than we have done here. His conclusions, however, were no less hesitant.

Summary

Two findings stand out from the results presented in this chapter. The first is that even the relatively brief interventions conducted in Kent schools did have some favorable effects on communication among the trained staffs. The second is that the strength of favorable effects is associated with the amount of training received.

In particular, lesser amounts of training -- less than 22 hours -- seem to have deleterious effects on the kinds of communication measured here, but greater amounts -- more than 27 hours -- had increasingly favorable effects.

Why should this be so? A somewhat speculative answer is that the smaller amounts of training provided a staff with the opportunity to air and share frustrations and conflicts,* but did not provide sufficient time to constructively deal with them and to make agreements about less conflicting and more satisfying ways of interacting. (It may also be that aspirations were raised and problems clarified during the early stages of training, as we mentioned in the last section, so that the trained staffs judged themselves by more stringent standards than did untrained staff.) The greater amounts of training did provide practice in skillful communication, opportunities to work out interpersonal and group conflicts, and shared experiences that were satisfying.

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* This assertion receives some support, if weak, from Table 6-6, where inspection shows that the pool of schools with the lesser amounts of training always showed a higher mean on the test of the lower-level skill. That is, the mean of this pool on the first-level test Ia was higher than its means on the second-level tests IIa and IIIa in 1970; the means were .04 on test Ia and -.12 and -.01 on the other two. Similarly, the respective means in 1972 were -.11 on test Ia and -.13 and -.18 on the other two. Similarly, the mean of this pool on the second-level test IIb was higher than the means on the third-level tests Ib and IIIb; the means were -.08 on IIb and -.19 and -.09 on the other two. Of course, one wonders whether the dynamics are the same when almost all of the means are in the negative.

The practical application of this finding -- confirmed by our own and others' experience -- is that both consultant and client should be prepared to commit sufficient time to an intervention to allow beneficial effects to occur; on the evidence of this study, a minimal time is between 22 and 27 hours of laboratory training for organizational development. That is, two day workshops are probably unwise, and a minimum of three or four days per workshop is vastly preferable.

This finding, while interesting and useful, is preliminary and tentative. First, the measure of the sheer number of hours spent in training is a fairly gross measure; it says nothing about the content or the quality of the training event itself. Second, it may be that the finding applies only to the particular kind of training provided in Kent. Other OD strategies, such as extensive process consultations to intact groups as they work or survey-data feedback interventions, are not represented here.

Finally, the results must be considered in light of various methodological problems that always confront the researcher and intervener dealing with living systems, which never display the neatly-controlled conditions of the laboratory. See Wyant (1974) and Chapter 13 for further discussion of these considerations.

Nevertheless, the beneficial results attributable to the interventions provide some confirmation of the theory and technology of organizational development as a strategy for producing change in schools, and the findings about effects of different amounts of training provide a useful guide to consultant and client alike as they determine the scope and extent of an intervention.

Chapter 7

READINESS FOR CHANGE

by Saturen, Pickens, and Runkel

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Chapter 7

READINESS FOR CHANGE

Saturen, Pickens, and Runkel

(final)

Why can some schools meet problems by undertaking collaborative, coordinated sequences of planning and action while others cannot? Why can some schools or districts make profitable use of outside consultants, while others revert to their previous unsatisfactory way of doing things? In short, why are some schools able to achieve constructive adaptation while others are not? One part of the answer to these questions surely lies in "readiness"--conditions and norms in schools and districts that can facilitate or hinder the commitment and collaboration necessary to establish new norms. This chapter will discuss the matter of readiness for change and present some evidence of the effects of several sorts of readiness for change. It will deal with the problem of how to assess whether a school can benefit from organizational training, and it will offer ideas on how to raise a school's ability to profit from training.

Since constructive adaptability in an organization is an ability to deal with the unpredictable kinds of problems that change brings, it is difficult to list specific organizational responses that constitute it. Solutions that are constructively adaptive in one school may be entirely inappropriate in another. We can, however, make the meaning of the concept clearer by citing some examples that seem to us to have been, at the time and place in which they occurred, evidence of constructive adaptation.

Illustrations of Constructive Adaptation

We shall first give two examples of episodes of work undertaken to establish new norms or structures to meet emerging needs in schools. We pick these examples from work other than the Kent project because examples as clear as these from individual schools within the Kent project are hard to come by.

Illustrations from Schools

Early in a one-year project in organizational development, the staff of a junior high school came to the realization that the school's area coordinators had inadequate communication channels among themselves and with the principal. As a solution to this problem, they decided to form a Principal's Advisory Committee to provide better channels. The Principal's Advisory Committee then discovered that they were unable to collect relevant information in a systematic way. They found they needed to clarify their new roles as collectors and processors of information, to review the competencies they would need in the new role, and to improve their competencies where necessary. They requested the help of CASEA consultants in doing these things and three training sessions were held. In this example, the school and the area coordinators recognized the non-routine nature of their task and called upon resources both inside and outside the school to achieve success in it. For more detailed information, see Schmuck and Runkel (1970, pp. 81-82).

The second example occurred in an elementary school undertaking team teaching and differentiated staffing. The district supported no kindergartens, and first-grade teachers had long been frustrated by the wide range of readiness with which children came into the first grade. The teachers who worked with first-graders formed a temporary task force to design a program to substitute for the unavailable kindergarten experience, using facilities and resources already available.

The task force put into operation a two-week program (called Project Jump) that provided a comfortable settling-in process not only for the first graders, but also for teachers and parents. During the two weeks, only half the enrolled students came to school during each half day. Eight to twelve students were assigned to each teacher. Activities were designd to help students feel at home in the school environment. Time was taken for tours that allowed students to become familiar with the school building and with other school personnel.

Two seminars were provided for the parents of incoming first-graders. During these seminars, the objectives and problems of the educational program were discussed. Parents and teachers were able to discuss their concerns, and channels of communication between them were established. Parents were also invited to work within the classroom during this period to help ease the children's transition, as well as to work out specific adjustment problems. Students with no previous school-like experience received special attention. The small class-size allowed teachers to get to know their students. Special strengths of students and potential problems were identified early in the children's educational experience. More detail is given by Tompkins, Seeberger, Winger, Dunn, Essig, and Rutter (1971).

In this example, the teachers abandoned the previous routine ways of coping -- that is, hoping the district would establish kindergartens, badgering the principal to "do something," and accepting the first part of the first-grade curriculum as sacrosanct. They drew upon resources both inside and outside the school -- Both Essig and Rutter, who helped plan and authorize the project, were employed elsewhere in the school district.

An Illustration at District Level

Following the expansion of the central office staff in Kent, the superintendent's cabinet found itself facing a number of obstacles to effective functioning. (We mentioned this episode briefly in Chapter 2.) Among the obstacles were poor communication, norms that inhibited healthy debate and disagreement, lack of clarity about roles, decisions made without using members' resources and relationships within the district that caused the cabinet to be viewed with confusion and mistrust. To help alleviate some of these conditions, the superintendent and members of the Kent cadre worked out a new format for cabinet meetings. They opened the meetings to broader participation, and they invited schools, departments, and other groups within the district to send representatives to attend the meetings.*

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* For a copy of the handout distributed to those attending the meetings, see Appendix 7-A.

Two members of the cadre of organizational specialists served as observers and provided process consultation and feedback. The following changes in the cabinet's functioning evolved: (1) the superintendent was able to change his role from one of traditional chairman to one of convener, which enabled him to be a participant in discussions and allowed him to distribute his authority among other cabinet members, (2) the group used consensual decision making on appropriate occasions, which drew out more widespread participation in decisions, and (3) time was allowed for debriefing group processes and for feedback of specialists' observations. This new format provided more satisfaction among cabinet members, facilitated communication between the cabinet and various groups within the district, allowed a forum for these groups to react to issues that concerned them, and increased trust of the cabinet throughout the district.

In this example, the superintendent's cabinet reacted to an emerging need for better communication in a non-routine way. They did not merely exhort one another to "communicate better." They made use of resources of their own members both in utilizing their own readiness to try out new norms and in utilizing specific communicative skills that some had learned during training sessions with CASEA consultants. They also made use of resources outside themselves -- the Kent cadre.

We saw in Chapters 5 and 6 that a school's ability to change often depends on the school's "readiness" to do so, but we began the analyses in those chapters without any intent, a priori, to examine readiness. It was the MINISSA program that brought the matter to our attention. In the study described in this chapter, in contrast, Steven Saturen, then of the CASEA staff, began with the concept of readiness in mind at the outset. He used data from the Kent project to test his ideas about the effect of a school's readiness on its ability to achieve constructive adaptation. We here describe his study (1972) and supplement the discussion with some data not available to him at that time.

Effects of Variety, Collaboration, and Training

Saturen (1972) undertook to find out the extent to which two sorts of readiness affected the ability of elementary schools to show constructive adaptability: (1) indications of willingness to express differences even in somewhat emotional situations and (2) indications of willingness to collaborate with others to improve teaching and to develop curriculum. He also included OD training as one of his variables because he postulated that it would produce heightened readiness. In sum, he assessed the effects of these three variables, and combinations of them, on indicators of constructive adaptability. The first variable, willingness to express differences, is an indicator of the first-level skill of bringing into view personal abilities and resources that we described in Chapter 3. The second variable, readiness for collaboration, is likewise the basis for second-level collaborative skills in subsystems.

Saturen's general hypothesis was that a high level of these three variables would enable a school, given time, to put into practice activities of the sort that indicate constructive adaptability. To allow time for these activities to show up, the outcome variables (indicators of constructive adaptability) were assessed at least one and as much as three years after Saturen assessed the independent variables of training, willingness to express differences, and willingness to collaborate. For the schedule of assessments, see Appendix 7-B.

We shall report results in this chapter concerning four of the variables Saturen chose as indicators of constructive adaptability. He picked these indicators because in these schools at this time, they seemed to be constructive responses to the demands of the environment. The indicators (Saturen, 1972) are:

(1) Estimated influence by teachers on how the school was run and on the principal. If decisions that effect the entire school are made individually or handed down by administrators, then it is likely that many resources remain untapped for producing and implementing the most adaptive actions.

(2) Relative amount of reported collaboration in developing curriculum and choosing teaching methods. Organizational changes must be coordinated and integrated among the staff.

(3) The percentage of respondents reporting involvement of students in developing regulations for student conduct. Adaptive organizations forecast demands from their environments and respond appropriately to them. Since students comprise a major portion of a school's environment, their changing needs must be understood if the school is to be adaptive.

(4) Number of innovations under way in the school that were judged useful by respondents. The most obvious indicators of adaptability are actual changes that occur.

Saturen's indicators of readiness turned out to be especially important when high levels of them were present *in a school that received organizational training*. As we shall see, we can conclude from the data here that elementary schools will react more fruitfully to training if they are high on Saturen's other two independent variables. This is very important information for school people and interveners to have. A great deal of pain, money, and time can be saved if schools do not try to begin strong organizational change before they are ready.

This substudy actually went beyond the three districts that are the focus of this book. The study used data not only from elementary schools in Kent, Auburn, and Federal Way, but also from schools in Eugene, Oregon. The data from the latter district were collected as part of a later project described in full by Schmuck, Murray, Schwartz, Smith, and Runkel (1975).

Assessing Variety

In this chapter we shall again use the term "variety," the shortened form of Buckley's (1967) term "variety pool." Wyant used the term in Chapter 6 for his test of the ability to initiate and receive ideas or discuss "delicate" matters that are surrounded by strong emotions. We shall use it here for the similar ability to express differences even in somewhat emotional situations. This is similar to the ability assessed by Porter in her test of "communication during emotion" described in Chapter 5, and in this sense, it is related also to the first first-level skill of communication. Saturen scored a school high on variety if, at pretest, the combined responses to the following four questions* were relatively favorable (weights used in scoring are given here in parentheses after each choice).

Item 2. Suppose you are in a committee meeting when Teacher X and the other members begin to describe their personal feelings about what goes on in the school; Teacher X listens to them and tells his own feelings. How would you feel toward X?

( ) I would approve strongly.	(2)
( ) I would approve mildly or some	(1)
( ) I wouldn't care one way or the other.	(0)
( ) I would disapprove mildly or some	(-1)
( ) I would disapprove strongly.	(-2)

Item 4. Suppose Teacher X strongly disagrees with something B says at a staff meeting. In Teacher X's place, would most of the teachers you know in your school seek out B to discuss the disagreement?

( ) Yes, I think most would do this	(2)
( ) Maybe about half would do this	(1)
( ) No, most would not.	(-2)
( ) I don't know.	(-1)

---

* Chapter 5 described the use of items 2 and 6 in Test A on emotional communication, item 4 in Test B on openness, and item 13 in Test E on openness. We do not take the view that a particular indicator should be given only one interpretation and be used only in one "test." If some of us interpret an item as a suitable indicator of one variable, others remain at liberty to interpret it as an indicator of another variable. Both interpretations can be "right" because, in fact, respondents can respond to a questionnaire item in more than one respect simultaneously. In this case, furthermore, it is easy to argue that communication during emotion (Test A) and being open to incoming information (Tests B and E) are both components of a group's ability to maintain access to their "variety pool."

Following the multitrait-multimethod paradigm (Campbell and Fiske, 1959), we hope that using items in different combinations for testing different hypotheses can illuminate both the conceptual meaning of our variables and the empirical meaning of the items themselves. We shall discuss these overlapping meanings in Chapter 13. We saw in Chapter 6 that Wyant used items 41, 42, 43, and 44 as indicators of variety. These items appeared only in the 1972 questionnaire, and Saturen was unable to use them because he began his study before the formulation of that questionnaire.

Item 6. Suppose you are in a committee meeting with Teacher X and the other members begin to describe their personal feelings about what goes on in the school; Teacher X quickly suggests that the committee get back to the topic and keep the discussion objective and impersonal. How would you feel toward X?

( ) I would approve strongly. (-2)
( ) I would approve mildly or some. (-1)
( ) I wouldn't care one way or the other. (0)
( ) I would disapprove mildly or some. (1)
( ) I would disapprove strongly. (2)

Item 13. Suppose Teacher X strongly disagrees with something B says at a staff meeting. In Teacher X's place, would most of the teachers you know in your school keep it to themselves and say nothing about it?

( ) Yes, I think most would do this. (-2)
( ) Maybe about half would do this. (-1)
( ) No, most would not. (2)
( ) I don't know. (1)

Assessing Readiness for Collaboration

Schools were considered relatively ready for collaboration if responses to these four questions* were favorable (that is, if respondents chose the the positively weighted alternatives):

Item 10. Suppose Teacher X develops a particularly useful and effective method for teaching something. In Teacher X's place, would most of the teachers you know in your school describe it briefly at a faculty meeting and offer to meet with others who wanted to hear more about it?

( ) Yes, I think most would do this. (2)
( ) Maybe about half would do this. (1)
( ) No, most would not. (-2)
( ) I don't know. (-1)

---

* In Chapter 5, we described the use of items 10 and 11 in Test C and item 14 in Test F, both tests built to be indicators of responsiveness. Here Saturen agrees closely with the authors of Chapter 5. By responsiveness, we mean a readiness to take action in response to a perceived need; Saturen chose items indicating a willingness to take collaborative action.

Item 11. Suppose Teacher X wants to improve his classroom effectiveness. In Teacher X's place, would most of the teachers you know in your building...

... ask another teacher to observe his teaching and then have a conference afterward?

( ) Yes, I think most would do this.	(2)
( ) Maybe about half would do this.	(1)
( ) No, most would not.	(-2)
( ) I don't know.	(-1)

Item 14. ... ask other teachers to let him (Teacher X) observe how the other teachers teach, to get ideas how to improve their own?

( ) Yes, I think most would do this.	(2)
( ) Maybe about half would do this.	(1)
( ) No, most would not.	(-2)
( ) I don't know.	(-1)

Item 53.* Regardless of policy or who now does it, whom would you prefer to plan and develop the school curriculum? Please mark one or more choices below:

( ) I don't care much who does it
( ) Citizens' or parents' committee
( ) Board of Education
( ) Superintendent
( ) Instructional supervisor
( ) Principal
( ) Department head or grade chairman
( ) A group of teachers
( ) The individual teacher
( ) Counselor(s) or guidance director
( ) School psychologist
( ) A student committee
( ) Other; specify ____________

(Here the "favorable" choice was "a group of teachers"; respondents were not penalized for marking other choices as well.)

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* We have given acknowledgments in previous chapters for sources of items 2, 4, 6, 10, 11, 13, 14. We are grateful to Max Abbott, Terry Eidell, and Roland Pellegrin of the early Program on Innovations at CASEA for items 53 through 59. Item 60 is original with us. Responses of all elementary schools in Kent and the mean responses in the Auburn and Federal Way districts to items 53, 54, 55, and 57 for all years when administered are shown in Appendix 7-D.

Training

Schools were considered trained if they had experienced at least one training event. Training events for schools were described in Chapter 2.

Assessing Constructive Adaptability

Saturen (1972) constructed ten measures to indicate conditions of organizational adaptability. Six of them showed weak or inconclusive results. Here we report the results on the remaining four: (1) amount of influence teachers perceived they had on how their school was run and on the principal's decisions; (2) reported collaboration by teachers in developing the curriculum, in deciding upon teaching methods used in the classroom, and in deciding upon subject matter; (3) participation by students in developing rules for student conduct; and (4) number of useful innovations occurring during the last year or two. Items used to indicate each of these four dependent variables are shown below.

Influence by teachers

Item 54. Please indicate your best estimate of the influence of teachers ... on the areas of school life described below. In general, how much influence do you feel the teachers as a group have on how your school is run?

( ) No influence
( ) Little influence
( ) Some influence
( ) Considerable influence
( ) Great deal of influence
( ) I have no opinion

(Scores on constructive adaptability here were higher when larger percentages of respondents chose the alternatives indicating the greater amounts of influence.)

Item 55. In general, how much influence do the teachers in your school have on the principal when it comes to his activities and decisions that affect the performance of the school?

(Same alternatives as above.)

Reported collaboration

Item 56. Regardless of the official policy, who actually develops the school curriculum? Please mark one or more choices below. (Here, adaptability is indicated by ther percentage checking the eighth choice: "a group of teachers." Respondents were not penalized for marking other choices as well.)

( ) I don't know who actually does this
( ) Citizens' or parents' committee
( ) Board of Education
( ) Superintendent
( ) Instructional Supervisor
( ) Principal
( ) Department head or grade chairman
( ) A group of teachers
( ) The individual teacher
( ) Counselor(s) or guidance director
( ) School Psychologist
( ) A student committee
( ) Other; specify_____________________

Item 57. This item concerns the choice of teaching methods you use in your classroom. Please mark "X" before the one statement below that best describes your part in deciding upon the teaching methods to be used in your classroom. (Adaptability is indicated by the percentage checking the second or fourth alternative below.)

( ) I choose my own teaching methods without assistance or direction.

( ) The final choice of teaching methods is left for me, but there are others whose job includes making recommendations or suggestions.

( ) Within certain limits I can choose my own teaching methods.

( ) As a member of a group or committee, I share with others the job of deciding the teaching methods to be used.

( ) I do not choose my own teaching methods. They are laid down for me by others.

Item 58. This item concerns the scope and sequence of subject-matter content. Please mark "X" before the one statement below that best describes your part in deciding upon the subject-matter content to be taught in your classroom. (Same choices and adaptability indicators as just above.)

Involvement of students

Item 59. Regardless of the official policy, who actually develops regulations for student conduct? (Adaptability is indicated by the percentage checking "a student committee.")

( ) I don't know who actually does this
( ) Citizens' or parents' committee
( ) Board of Education
( ) Superintendent
( ) Instructional supervisor
( ) Principal
( ) Department head or grade chairman
( ) A group of teachers
( ) The individual teacher
( ) Counselor(s) or guidance director
( ) School psychologist
( ) A student committee
( ) Other; specify____________________

Incidence of innovations. (For this item, adaptability was indicated by the percentage of teachers describing two or more changes.)

Item 60. How about recent changes that could have useful effects on your school: Have there been any innovations, any new ways of doing things, that began during the last year or two that you think could have helpful effects on the school? If so, please describe each very briefly below. (Space was provided for writing.)

Hypotheses

It will be convenient to use some symbols to stand for Saturen's three independent variables. On the variables of "variety" (V) and readiness for collaboration (C), Saturen divided schools into high and low categories by dividing them at the median score on the pretest. The symbols we shall use for high and low categories of the three variables are the following:

Training:

T if the school received OD training during the year prior to the posttest

t if there was no history of training

Norms regarding communication of feelings and disagreements:

V if norms supported these behaviors (high variety)

v if norms did not support these behaviors (low variety)

Norms regarding readiness for collaboration:

C if norms supported collaboration (high readiness for collaboration)

c if norms did not support collaboration (low readiness for collaboration)

The prediction was made that the values of each outcome variable would be highest in schools where the pretest indicated that the norms made it easier for people to communicate feelings and disagreements (V), where the norms supported collaboration (C), and where the school had received OD training (T); the outcome scores would be lowest, we thought, in schools where the opposite conditions existed (v, c, and t).

Predictions were also made about the relative effects of the different possible combinations of the three independent variables. There were eight ways that a school could be catergorized: TVC, tVC, TvC, TVc, tvC, tVc, Tvc, and tvc. Saturen assumed that one school would score higher than another on outcome measures if the value of at least one independent variable were higher in the first school and the value of no other variable were lower. For instance, he predicted that TVC would be higher than TVc, but made no predictions about whether TVc would be higher than tvC. Using this assumption, Saturen predicted the following relations on outcome measures (note that predictions were not made for all possible pairings of the categories):

TVC would be the highest,

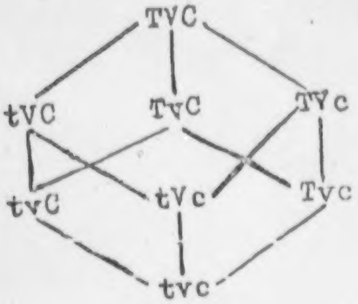
tVC, TvC, and TVc would be next highest,

tvC would be lower than either tVC or TvC,

tVc would be lower than either tVC or TVc,

Tvc would be lower than either TvC or TVc, and

tvc would be lowest of all:



However, no schools having the combination TvC or Tvc appeared in the sample at pretest. Consequently, the predictions that could be tested were:

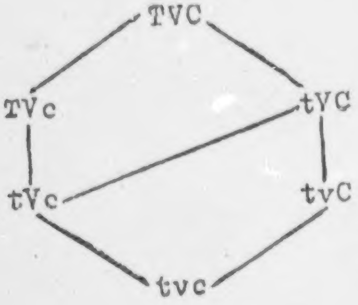
TVC would be the highest,

tVC and TVc would be next highest,

tvC would be lower than tVC,

tVc would be lower than TVc, and

tvc would be lowest of all:



When Saturen examined the pretest scores (independent variables) of each school and then categorized them as we have explained above, schools appeared in six of these categories: TVC, tVc, TVc, tvC, tVC, and tvc. There are 13 possible ways to pair these six categories, and Saturen made predictions about 12 of the pairs -- predictions, that is, about the ordering of the members of the pair on any dependent variable at posttest. For instance, his first prediction was that if TVC and TVc were paired, TVC would be higher on the postests. No predicition could be made about the pairs in the diagram not connected by a line or combination of lines (TVc and tvC).

Results

When Saturen examined the posttest scores, he used the Mann-Whitney U-test* of statistical significance to determine the probability that the orderings obtained on the posttest were due to chance. Examining orders within each of the 12 pairs on each of the four dependent variables as a first analysis (48 orderings of the pairs in all), Saturen found 14 of the 48 to be significant at least at the .10 level and in the direction predicted; five showed a difference in the predicted direction but were not significant; 26 showed miniscule differences that were not significant; and three showed significant differences opposite to prediction. The great bulk of significant differences, however, occurred when trained schools (T) were compared with untrained (t).

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* For more information about the Mann-Whitney U-test see Siegel (1956) pp. 116-127.

Another way to summarize the results among the outcome variables is shown in Table 7-1 below. To produce this table, Saturen gave each school a score on each outcome variable according to the percentage of respondents giving favorable answers to the items on the posttest. Then the mean on that variable was computed among the schools in each pretest classification (TVC, TVc, etc.). Finally, rank-order numbers were given to the six means. In Table 7-1, the six groups of schools, top to bottom, are listed in the order of the magnitude of predicted outcome scores, with TVC highest and tvc lowest. The results at the first posttest were calculated by Saturen in the original study; the results at the second posttest were calculated by the other co-authors of this chapter at a later date.*

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* The periods between first and second posttests varied according to the years data were available and according to the times training was given to some of the schools. Saturen tried to use pretest data as close as possible to first training. For four schools, the interval between posttests was one year, for 17 schools the interval was two years, and for six schools, it was three years. Three schools had no second posttest.

One of the four items in the original "test" of actual collaboration was not administered in 1972. The scores on actual collaboration in 1972 may not have precisely the same meaning as those from the first posttest. The meanings are probably very close, however, because both the three-item and four-items "tests" fit the pattern we shall see below in Table 7-3.

Table 7-1. Ordering of groups of elementary schools of four districts at first and second posttests on indicated dependent variables

Type of school	No. of schs	Predicted rank	Obtained rank at first Posttest*			
			Influence	Actual collaboration	Students	Innovations
TVC	4	1	1	1	1	1
TVc	2	2 or 3	3	3	2	6
tVC	4	2 or 3	5	6	6	3.5
tVc	5	4 or 5	2	2	3	5
tvC	7	4 or 5	4	5	4	2
tvc	8	6	6	4	5	3.5
	30					
				Obtained rank at second posttest*		
TVC	3	1		1	2	2.5
TVc	1	2 or 3		6	6	6
tVC	4	2 or 3		4	1	4
tVc	5	4 or 5		2	3	1
tvC	7	4 or 5		3	5	5
tvc	6	6		5	4	2.5
	26					

* First posttests, analyzed in Saturen's (1972) original study, occurred at different times in different schools: 1969, 1970, and 1971. See Appendix 7-B for details. Second posttests, analyzed later by the other authors of this chapter, all occurred in 1972. In both parts of the table, the independent categories (TVC, TVc, etc.) contain the schools assigned by Saturen according to their scores on the independent variables assessed in years previous to the first posttest.

The variable of perceived influence by teachers is missing in the lower part of Table 7-1 because the items on this variable were not administered in the Kent area in 1972. Only 26 schools contribute data to the lower part of the table, instead of 30, because two schools (E02 and E08) were not administered questionnaires in 1972, because one school (A01) was no longer in existence in 1972, and because we are reserving for later discussion the case on one school (K02) that received its first training after the administration of its first (1970) posttest.

Some rankings correctly predicted. A cursory glance at Table 7-1 reveals the fact that we did not achieve a simple confirmation of Saturen's predictions. It is true that the predictions about the top (TVC) and bottom (tvc) categories turned out correct in a fair number of instances. The top category was that of trained schools high on both variety and readiness for collaboration; this cluster of schools can be seen to have ranked first on all four outcome variables at the first posttest and on actual collaboration at the second posttest.* The bottom category (tvc) cluster stood lowest on perceived influence and next to lowest both on involvement of students at the first posttest and on actual collaboration at second posttest. Aside from these obvious outcomes, the data are not immediately easy to interpret.

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* Table 7-1 shows that on the variable of incidence of innovations, the TVC schools dropped from first place at first posttest to a tie for second place with tvc schools at second posttest. This does not necessarily mean that the schools had discontinued their innovative activities. One possible reason TVC schools dropped their frequency of reporting innovations is that they had so successfully implemented these innovations that they no longer considered them something "new." We have data that indicate that at least one school--K12--actually dropped its frequency of reporting innovations of the collaborative type at the time when these innovations had successfully been implemented. Further discussion of this will be made in Chapter 10.

The complexity of the data can be examined in another way. We can ascertain the Spearman rank-difference correlation between the predicted ordering given in Table 7-1 and the orderings actually obtained on each of the dependent variables to see how close the obtained orderings are to the predicted ordering. We can also calculate the rank-difference correlations between the obtained orderings at first and second pretest to see how stable the obtained orderings were from one year to the other. Table 7-2 shows these correlations.

Table 7-2. Rank-difference correlations between orderings of groups of elementary schools of four districts on indicated dependent variables and on other orderings

	Influence	Actual collaboration	Students	Innovations
Correlations between predicted ordering and ordering on dependent variables at first posttest	.63	.34	.54	.26
Correlations between predicted ordering and ordering on dependent variables at second posttest		.31	.37	-.34
Correlations between dependent variables at first and second posttests		.49	-.26	.10

The correlations shown in Table 7-2 give small support for Saturen's overall hypothesis. Five of seven correlations with the predicted ordering are positive, but most are low and none is statistically significant. We can also see that the correlations between years are low. This is not surprising, since we should expect a deterioration of effect over two years in view of two facts: (1) the conditions of the schools on variety and readiness for collaboration may have changed in the interim and (2) the amount of training received by the "trained" schools was small, as we have mentioned before. (The deterioration can also be seen among the scores tabulated in Appendix 7-C.)

We can also note in Table 7-2 that the standing of schools on incidence of innovation showed only an insignificant correlation between posttests. This outcome fits well with our findings to be set forth in Chapter 10 concerning the oscillations that schools show in undertaking innovations.

Finally, we have the complication of school K02, which fell in the category tvc in 1968, but received training in August of 1970, subsequent to the 1970 administration of questionnaires in the spring of that year. In respect to the 1972 posttest, this school had then to be categorized as Tvc--a category that had not existed in Saturen's original pretest data. On the second posttest assessment in 1972, this school turned up ranking first among the seven pretest clusters on involvement of students, it tied for first place among the seven clusters on incidence of innovations, and it placed third among the seven clusters on actual collaboration! All three of these scores were positive (above the district mean).

The high standing of K02 caused us to wonder what its scores were on variety and collaboration just before it was trained in 1970. We felt this information would be especially useful because it fit Saturen's design of assessing schools on the pretest as close as possible to training. We were able to calculate these scores by examining the responses given by school K02 in 1970 to the pretest questionnaire items. *We discovered that K02's pretest scores had indeed risen a great deal by 1970. In 1968 on variety, K02 was 213 points below our cutoff point for V schools; in 1970 it was only 3 points below the cutoff point. On collaboration, K02 in 1968 was 190 points below the cutoff point; in 1970 it was only 5 points below. We can see that one reason K02 behaved so much like TVC schools on posttest is that by 1970 it almost was TVC.

We shall examine this school along with the others in our analysis below, but we shall put very little weight on its relation to other schools on outcome variables, both because of the unusual placement of its training between pretest and posttest and because it is the only school in its new category.

Clearly, if we are to find any instructive pattern in the data of Table 7-1 beyond the findings for the schools in categories TVC and tvc, we must undertake a more detailed analysis. To do so, we shall take each pair of categories in turn and examine the evidential support for a given ordering between the two members of the pair. Table 7-3 shows the results of this analysis.

In Table 7-3, we again see moderately strong evidence of the superiority of the condition TVC and the inferiority of the condition tvc.

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* Although Saturen chose to use items for his pretest from 1968 only, all items were administered in 1968, 1969, 1970, and 1972.

Over the four variables and the two posttests, the first section of the table shows TVC schools higher than other types of schools in 33 of the 38 instances--that is, in 87 percent. In the second section 18 out of 23 instances (not counting the tie) or 78 percent conformed to prediction. The table accounts for eight of the 12 pairs for which Saturen made predictions and lists two pairs for which no prediction was made (because there was no Tvc school at time of pretest). It contains only pairs that were connected by lines in the diagrams under the section entitled Hypotheses because these were the only pairs about which Saturen's theory allowed him to make predictions. The category TvC never occurs in this table or the following tables because no schools ever occurred in this category. The following seems a fairly reliable finding, and one worth further investigation in the field: that elementary schools higher than average on all three variables T, V, and C will show up higher on outcome variables of the sort examined here than will schools low on one or more of these variables, and that schools low on all three have a very poor prognosis. In other words, if a school is low in ability to express differences in emotion-fraught communication, low in readiness to take even small steps toward collaborative problem-solving, and does not seek outside help such as organizational training, we should not expect: (1) its staff to feel influential, (2) its teachers to collaborate in building curriculum, in selecting teaching methods, or in selecting subject matter, (3) to find students participating in developing rules for student conduct, and (4) to find the school undertaking innovations. On the other hand, if a school is high on variety, is high on readiness for collaboration, and has undertaken training for organizational problem solving, then it is likely to exhibit some of the four kinds of activities characterizing our dependent (outcome) variables.

Table 7-3. Conformity of pairs of groups of elementary schools from four districts to predicted orderings within pairs on four dependent variables at first and second posttests

Orderings and predictions	Influence at first posttest	Actual collaboration		Students		Innovations		Percent fit
		First	Second	First	Second	First	Second	
TVC > TVc	+	+	+	+	+	+	+	87
TVC > tVC	+	+	+	+	-	+	+	
TVC > Tvc		-	+		-		-	
TVC > tVc	+	+	+	+	+	+	-	
TVC > tvC	+	+	+	+	+	+	+	
TVC > tvc	+	+	+	+	+	+	-	
tVC > tvc	+	-	+	+	+	0	-	78
tVc > tvc	+	+	+	+	+	-	+	
Tvc > tvc			+		+		+	
tvC > tvc	+	+	+	+	-	+	-	

Key

A plus indicates that the orderings at posttest did conform to the predictions listed under "Orderings and predictions." A minus indicates that they did not. A zero indicates that the two groups under"Orderings and predictions" tied at posttest. The sign ">" means "scored higher than."

The table has told us a good deal about schools in the top and bottom categories, TVC and tvc. Can we formulate other tables that will tell us anything about other relations among categories?

A pattern in contrary results. The pairs of categories listed in Table 7-4 are written with their categories in the order opposite to the prediction made by Saturen. (The table also includes one pair for which no predictions were made.) In this section plus means that the data support the reverse of Saturen's prediction and support the order given in the table instead. According to the data behind this part of the table, the pattern that stands out is this: schools that are high on only one of the three readiness variables, (or, in one case, even on none) score higher on the posttest in most instances than schools that are higher on two or the readiness variables! Saturen (and we) began with the simple hypothesis that the readiness variables were additive, but the data argue strongly that the effects of combinations of these variables are interactive, not simply additive.

Table 7-4. Conformity of pairs of groups of elementary schools from four districts to orderings which are the opposite of those predicted within pairs on four dependent variables at first and second posttests

Orderings (Opposite to prediction)	Influence at first posttest	Actual Collaboration		Students		Innovations		Percent fit
		First	Second	First	Second	First	Second	
tVc > TVc	+	+	+	0	+	+	+	81
tvc > TVc	-	-	+	-	+	+	+	
Tvc > TVc			+		+		+	
tVc > tVC	+	+	+	+	-	-	+	71
tvC > tVC	+	+	+	+	-	+	-	
Percent fit	92	83	100	91	67	82	60	81

See key under Table 7-3

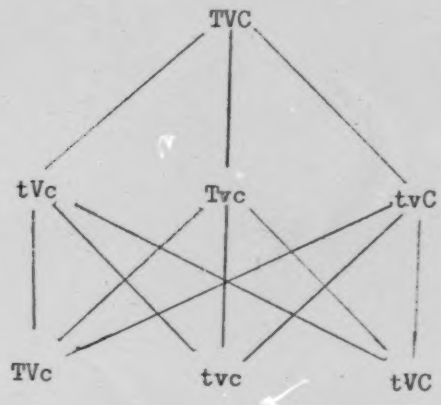
Table 7-5. Conformity of pairs of groups of elementary schools from four districts to unpredicted orderings within pairs on four dependent variables at first and second posttests

Orderings (Unpredicted)	Influence at first posttest	Actual collaboration		Students		Innovations	
		First	Second	First	Second	First	Second
tVC > TVc	-	-	+	-	+	+	+
tvC > TVc	-	-	+	0	+	+	+
tVc > tvC	+	+	+	0	+	-	+
Tvc > tVC			+		+		+
Tvc > tvC			+		+		+
tVc > Tvc			+		-		+

See key under Table 7-3

Figure 7-1 Approximate ordering of groups of Kent elementary schools on dependent variables

(See text for meanings of abbreviations of groups of schools. A descending line connecting two symbols means that schools symbolized by the upper abbreviation usually scored higher on dependent variables than schools symbolized by the lower abbreviation.)



The finding in Table 7-4 is after the fact; it comes about from a serendipitous alignment of some results quite opposite to our prediction. We shall have more confidence in this finding after someone has obtained similar data, showing the same pattern, from other schools. Nevertheless, the fact that the outcomes opposite to prediction were not a hodge-podge mix of pairs, but were a group showing the clear pattern described above, lends cogency to the finding. Furthermore, we can find more support in Table 7-5.

We made no predictions about the ordering within the pairs listed in Table 7-5. In listing the findings in this table, we arbitrarily wrote the categories within each pair in the order that would yield the greatest number of "pluses" after the pair. Looking for pairs that compare a category having one high variable with a category having two high variables, we find two of them: tvC > TVc and Tvc > tVC. Both these serendipitous pairs fit the pattern we saw in Table 7-4.

Figure 7-1 gives an approximate summary of the patterns we have seen in Tables 7-3, 7-4, and 7-5. The descending lines in the figure stand for the evidences of superiority of the sort we have been discussing of one category of schools over another. We have omitted some of the weaker findings from the diagram. For example, we found a balance of instances favoring the deductions that tVC > tvc > TVc, but the balance was so slight that we have not drawn lines corresponding to these relations. One should also remember that the category Tvc owes its place in the diagram only to one school, and a maverick at that.

Discussion

The interaction of Saturen's three conditions of readiness for organizational change in schools has important implications for schools facing change and for consultants who may wish to help them. It seems to be the usual sorry fate of innovations requiring new organizational interdependencies to falter and die. The difficulties entailed can only be overcome if many conditions are working to support the staff through the hazardous transition. Overall, the evidence we have here seems to argue strongly that the conditions of outside help of some sort (T), ready expression of feelings about differences (V), and willingness to try collaborative work (C) are all necessary, though not always sufficient, to bring about and stablize new patterns of interdependence. We have already remarked about the power of the TVC condition as a springboard to new patterns of interdependence in schools and about the weakness of the tvc condition. But there are subtleties in the data (summarized in Figure 7-1) that are worth reviewing.

Variety. We have called this variable by several names: readiness to express disagreements, communication in emotion-fraught situations, and maintenance of access to the "variety pool." It comes closest to what we think people mean when they speak of a "live" school or one where "they are full of ideas." A school high on variety is not necessarily one where innovations are being carried forward, nor is it necessarily a happy school. It is a school where there is a tumult of ideas about how things ought to be (instead of the way they are) and a great deal of heartfelt expression about the matter. The resulting commotion can be optimistic and constructive; it can also be shattering and bitter.

One of our impressive and unexpected findings was the relatively high standing on the dependent variables of the five schools that were high on variety but low on readiness to collaborate and had had no training--the tVc schools. Before looking at the data, we had predicted that these schools would outrank only the tvc schools, because they were high on only one of the three variables. Far from appearing near the bottom on the outcome variables, however, this cluster of schools almost always appeared as high as the median cluster, and were much higher than that more often than not. Because this showing was very unexpected, it seems worthwhile to examine the performance of these schools in more detail.

The tVc schools ranked very high on most posttests. They ranked second on three posttests and first on one. Overall, this is a showing second only to the TVC schools. Apparently, a school high on variety alone, unaccompanied by training or a true readiness for collaboration, can take some first steps toward new sorts of interdependence of the sort indicated by our four posttest variables. Not only did tVc schools show up relatively high among other categories, but they remained high on actual collaboration between the two posttests, and actually made a great leap upward on incidence of innovations! (Whether they succeeded in making the innovations stick is something we do not know.) The upward change of mean score on innovations is especially impressive in view of the fact that every other change of this cluster and every change of every other cluster between the two posttests was downward. (This downward trend can be seen in detail in Appendix 7-C.)

A school that exhibits an active "variety pool"--in which members make known a lot of ideas about how things might be better--is a school where members are saying to one another that things *ought* to be better and there are ways of moving in that direction. Apparently, if enough members make this attitude known, at least a few steps will be taken. Still, we should remember that the condition tVc is not sufficient to produce, very often, a stable new pattern; even the rise in the mean score of tVc schools on incidence of innovations does not promise that the schools will succeed in making those innovations work. We shall see in Chapter 10 that several schools in Kent had, in one year or another, the largest percentage of members reporting innovations. But the *only* school that maintained that top position for as long as two consecutive assessments (1970 to 1972, actually) was school K12, a school that was a type TVC at the time, and was the school that had received more training than any other in Kent.

Variety with readiness for collaboration. Figure 7-1 reminds us that schools in category tVC, contrary to our prediction, usually did less well than schools in the categories tVc, Tvc, or tvC. In his interpretation of these results, Saturen (1972) speculated that a school high on both V and C is likely to eagerly attempt collaborative projects and is likely to vociferously express feelings about the frustrations that are then encountered in the collaborative work. But without improved skills to make collaboration work, and without training to improve those necessary skills, the tVc school is likely to give up in the pain of trying to cope with seemingly irresolvable conflicts. This speculation seems to us very sound.

Variety with Training. We also see in Figure 7-1 that schools in category TVc did worse than predicted. The combination of T and V with c, like t with V and C, also seems to us to be a combination headed for trouble, now that the data force us to think harder about it. This is true especially if amounts of training are low, as was the case with these schools. Too little training for organizational change, or the wrong kind of training (such as training on problem solving when the prerequisite collaborative skills are insufficient) given to a school that is high on variety can encourage the school to complain loudly about its present state, to generate many ideas for change, and even to try to begin to make things different. But low readiness for collaboration can stop the plunge into action before it really starts. The TVc school, if the training fails to do anything to heighten the readiness to collaborate, will probably commiserate noisily with itself about its discontent and give tongue to a variety of half-thought-through plans for alleviating the discontent, but it will probably retreat from concerted action, dejected, when willingness to collaborate is found wanting.

Table 7-1 showed with special drama the weakness of the TVc condition. At the first posttest, one year after pretest for 14 schools and two years after pretest for the rest, the TVc schools ranked third on three dependent variables and last on the fourth. Then on the second posttest, an average of two years later, the TVc schools had fallen to last on all three variables! Even on the variable of incidence of innovations, where we would expect the regression effect to give TVc a little boost after the first posttest, the TVc schools stayed at the bottom. In sum, having little readiness to work together, a willingness to complain, and just enough training in communication to encourage the complaints to be free and frequent all add up to a sorry state for a school to be in.

In comparing both tVC and TVc schools to the tVc schools that performed unexpectedly well, we speculate that schools high in two areas may have been rather zealous about making changes and might have proceeded less cautiously than the schools with high scores only on V. These schools may have been motivated to move ahead more quickly than their skills would warrant and may have failed because of their impatience. The tVc schools, on the other hand, with high scores in only one area, (with no desire even to volunteer for training) may have moved ahead more slowly, and only attempted small changes that were easier to accomplish. But of course this is speculation.

Differences in amounts of training. We have just speculated about the effects too little training might have among the TVc schools, and we saw in Chapter 6 that too little training did, indeed, have a deleterious effect upon communication in schools. It is time we looked at the amounts of training received by the trained schools in Saturen's study. The hours of training are shown in Table 7-6.

Two schools listed in Table 7-6--E02 and E08--need special explanation.* In those two schools, we deliberately tried to avoid training the entire staff. Instead, we concentrated on a "steering committee" of five. It is impossible to say objectively how to compare the amount of training given to the steering committee in E02 or E08

Table 7-6. Schedules and amounts of organizational training given elementary schools in four districts

Category and school	Pretest year	Hours of training	First posttest year	Hours of training	Second posttest year
TVC: K12	1969	18	1970	28	1972
TVC: E02	1970	low*	1971	none	none
TVC: E05	1970	90	1971	none	1972
TVC: E07	1970	90	1971	none	1972
TVc: K05	1968	6	1970	6	1972
TVc: E08	1970	low*	1971	none	none
Tvc: K02	1968	none	1970	14	1972

* In schools E02 and E08, a steering committee of five persons received 40 hours of training in August 1970, and several subgroups received a total of about ten hours of follow-up training in each school between August 1970 and January 1971. The staffs only very rarely received training as a whole body. Excluded from all figures in this table are hours for entry, diagnostic interviewing, process consultation, survey feedback, special coaching, and planning for further work.

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* The training and results at four of the schools listed here have been described at considerable length in the monograph by Schmuck, Murray, Schwartz, Smith and Runkel (1975). In that monograph, school E02 is called Humboldt, E05 Palmer, E07 Spartan, and E08 Allen.

to training given to an entire staff. Arbitrarily, we shall estimate the effect of the training in those two schools to belong in the "low" range defined by Wyant--that is, less than about 25 hours of training received by the whole staff. This is the interpretation we recommend for the entry of "low" in Table 7-6.

The amounts of training shown in Table 7-6 are revealing. The TVC cluster contained four schools at first posttest, two with large amounts of training and two with small amounts. Three of these took the posttest in 1972, only one of which had received additional training; school K12 had by then received 46 hours of training.

As it turns out, the TVc schools had much less training than the TVC schools. There were two TVc schools at first posttest, both of which had low amounts of training. There was only one that took the posttest in 1972, and it had only 12 hours of training for its staff. Perhaps the condition of low c made the school reluctant to commit itself to large dosages of training.

Level of effect. So far, we have paid attention chiefly to relative effects, examining only the ordering of the mean scores on the outcome variables. But a mean in first rank can be very high or very low in comparison to possible highs and lows. We shall look now at absolute levels of mean scores. Table 7-7 shows mean scores (and their ranks) for certain of the clusters of schools that we have been discussing.

Table 7-7. Means and ranks of selected categories of elementary schools on dependent variables at first and second posttests

(See text for meaning of categories. Means in this table omit category Tvc.)

Category	Influence at first posttest	Actual collaboration		Involving students		Innovations	
		1st	2nd	1st	2nd	1st	2nd
Mean* of highest category (rank 1)	360	223	191	22.3	2.4 (tVC)	53	43 (tVc)
Mean of TVC schools (and rank)	360 (1)	223 (1)	191 (1)	22.3 (1)	1.9 (2)	53 (1)	30 (2.5)
Mean of tVc schools (and rank)	306 (2)	168 (2)	132 (2)	12.3 (3)	1.8 (3)	29 (5)	43 (1)
Fraction of range between TVC and tVc means	.37	.63	.61	.67	.04	.53	-.34**
Grand mean of all schools	277	159	120	11.1	1.3	34	29
Mean of TVc schools (and rank)	289 (3)	163 (3)	95 (6)	13.5 (2)	0.0 (6)	8 (6)	5 (6)
Fraction of range between TVC and TVc means	.49	.68	1.00	.58	.79	1.00	.66
Mean of lowest category (rank 6)	215 (tVC)	135 (tVC)	.95 (TVc)	7.2 (tVC)	0.0 (TVc)	8 (TVc)	5 (TVc)

* All means given are raw scores from Saturen's first pretest and from our own calculations for second posttest. Complete mean raw scores appear in Appendix 7-C.

** Mean for this one case is above the mean of the TVC schools; this negative fraction means that the mean for TVC is .34 of the range down from the mean for tVc. At the time of the second posttest, the three TVC schools were probably consolidating previous innovations instead of starting new ones; see Chapter 10 for further discussion of this probability.

Omitting the special case of the single Tvc school, Table 7-7 shows that the TVC schools outscored all others; they stood first in rank on five of the seven posttests and second on the other two. Furthermore, in the case of the five posttests on which the TVC schools stood first, large proportions of the obtained range of means lay between them and the next highest clusters. For example, the tVc schools stood .37 of the range below the TVC schools on influence at the first posttest.* The four other gaps and the next-highest clusters were: .63 to tVc, .61 to tVc, .58 to TVc, and .42 to tvC.* In brief, when the conditions T, V, and C were all brought together, the combination was sufficient to lift the performance of those schools to levels far above other clusters on all posttests except those on involving students and incidence of innovations on the second posttest. Even in the case of incidence of innovations, we have other data* showing that the TVC schools were still

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* The fraction of range between TVC and tVc means is calculated by (1) determining the actual range by subtracting the mean of the lowest category from the mean of the highest category (in this case 360-215 = 145) (2) finding the difference between TVC and tVc (360-306 = 54) and (3) calculating what fraction of the range the difference is (54 ÷ 145 = .37).

* The last mean is not shown in Table 7-7.

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* At the second posttest, the TVC schools comprised schools K12, E05, and E07. The innovative activities of school K12 will be discussed in Chapter 10. Schools E05 (Palmer) and E07 (Spartan) are described in the monograph by Schmuck, Murray, Schwartz, Smith, and Runkel (1975).

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maintaining recently begun innovations of collaborative sorts such as team teaching and multiunit structure. We infer that some of the decrease in percentages of staff reporting "new" innovations in 1972 in these schools was due to the fact that they were not thinking of these innovations as being still "new." In the case of the posttest on involving students in developing regulations for student conduct, the percentages of staff reporting this kind of collaboration were always small, and especially so in 1972. The restricted range no doubt makes the ordering of clusters not very reliable. All in all, the record of the TVC schools on these outcome variables in comparison to the other 26 schools was truly outstanding.

We should also take note again of school K02, which was newly trained at the time of the second posttest. This school (not shown in Table 7-7) stood first on the second posttest on involving students and tied for first on incidence of innovations. Counting this school, trained clusters took first place on all seven posttests. We explained earlier the special circumstances associated with this school and the reasons for interpreting its performance with special caution.

Table 7-7 gives us a better perspective on the tVc schools--those high in variety, but low in readiness for collaboration and without training. These schools, it is true, showed an overall standing that was second only to the TVC schools. But the competition was not at all close, as we pointed out above when we listed the gaps between the TVC means and the next-best means.

Table 7-7 also dramatizes the low standing of the TVc schools. The gap between the means of the TVC schools and the TVc schools was about half the range on influence at the first posttest and more than half on all others. On two posttests, the TVC schools were first and the TVc schools were last! We should remember that the TVc schools received considerably less training, on the average, than the TVC schools, and that this was especially true at the second posttest in 1972.

In sum the TVC schools stood out as star performers. The tVc schools surprised us by standing much higher than predicted, but not at all as high as TVC. Furthermore, when tVc becomes TVc after training, performance drops (see Figure 7-1); TVc schools surprised us by standing much lower than expected. The practical implications for a school or consultant undertaking organizational change are (1) if a school scores high on both V and C, training (putting them into the TVC category) is a good investment (2) if a school scores high on V and low on c, it will probably do better without training than with training--unless its score on C is somehow raised, and (3) schools undertaking change run great risk in allowing any one of these three variables to remain low.

Oscillations. In this chapter, as in other chapters, we have seen the scores and relative standings of schools shift about a good deal on the variables we have been examining. Part of this shifting is due, of course, to inaccuracies of measurement. But another part is due to real effects. For example, we can see in Table 7-7 and in Appendix 7-C a pervasive downward trend in mean scores from earlier years to 1972. Not all the questionnaire items we examine in this book show a decline in favorable response; the explanation for the decline in favorable responses to our items on actual collaboration, involvement of students, and incidence of innovations cannot be merely due to a general disaffection with the questionnaires. At the same time, schools from four districts lying in two different regions of the West Coast contributed to the data in this chapter; we cannot conclude that the decline in favorable response was due to some condition peculiar to one district or region. We must conclude that the questionnaire items we chose as indicators of our dependent variables were reflecting a condition in all four districts that increased the efforts of the sort indicated by these items in the period 1969-71 and decreased those efforts by 1972. It is possible that our measurements coincided with several societal trends: the ebb of "the decade of innovation" in education, the decline of the student movement, and the general retrenchment of U. S. society.

In particular, there was a condition in these four districts that probably increased and then decreased collaborative efforts of the sort sampled by our outcome variables (actual collaboration in building curriculum, in selecting teaching methods, or in selecting subject matter; involving students in developing rules for student conduct; and incidence of undertaking innovations). From our own visits in these four districts and from our collection of historical documents, we know that there was a strong press upon the schools of these districts during one or another part of the period 1969-71 to undertake innovations requiring increased collaboration such as team teaching, differentiated staffing, and the multiunit school. We also know that economic conditions, at least in Kent and the two adjacent districts, had discouraged innovation in general by 1972. In addition to the economic factor, we also know from our own direct work with schools in these districts that many schools gave up major organizational innovations after failing to make them work during the 1969-71 period. And in addition to this direct information, we know from the literature that abortive efforts in organizational change in schools are common. (We shall discuss these trends more fully in Chapter 10.) In brief, we believe that the decline of scores on our dependent variables reflected actual organizational dynamics in these schools, not some weaknes in the data.

Within the general decline of scores between posttests, there were changes in rank order also. This fact was clear in Table 7-1, and Table 7-2 told the same story in a different way: the rank-difference correlations between posttests were .49 for actual collaboration, -.26 for involving students, and .10 for incidence of innovations. Some of these changes in position were no doubt due to random fluctuations; some of the 1972 means, especially, were very close together (see Appendix 7-C) and could easily have gone one way or another by chance or because of small unknown influences.

Other changes between posttests were no doubt due to the reactions of schools in certain conditions of readiness to the stresses of attempting change, to training, to relaxation of demands from the environment to innovate, or all of these. The largest downward changes (either in rank, in score, or both) were those of TVc schools on actual collaboration (from rank 3 to 6) and on involving students (from rank 2 to 6). One of the largest upward changes was probably a chance outcome--that of the tVC schools on involving students. From being the lowest category of school on the first posttest, with a mean score of 7.2, it moved only slightly downward to 2.4. However, because other schools dropped precipitously, the mean of 2.4 turned out to be higher than the mean of any other category except that of the special case of school K02, which created the category of Tvc in 1972. Among such low means as these, differences in rank could have been produced by the responses of only one person in each of a few schools. In 1972, only minuscule percentages in any category reported involving students in formulating their own rules of conduct. A more important upward change was that of the tVc schools on innovations; they showed the only increase in mean score that occurred, moving from rank 5 to 1. Furthermore, the percentage of staff reporting two or more innovations in these schools in 1972 was of important size--43 in a range from 5 to 43.

In brief, all categories of schools showed a deterioration between posttests except for the one instance just mentioned. Mean scores on actual collatoration showed less change in rank order between posttests than did the other two variables, and remained farther from zero than did the other two. Furthermore, the TVC schools maintained their first place on actual collaboration. The variable of actual collaboration conformed to our predictions more closely than the other outcome variables did; this is hardly surprising, since one of our predictor variables was readiness for collaboration.

Incidence of working with students on regulations for student conduct showed the most variability between posttests, and mean scores dropped very low on the second posttest. It seems possible that many people in the schools were trying to involve students in formulating rules in 1970, but it was so difficult, they had stopped trying by 1972. Therefore their scores both on involving students and on innovations went down. It seems likely, too, that some degree of actual collaboration between teachers on classroom matters was easier to achieve than working with students or than maintaining school-wide innovations. Further, it seems likely that collaboration among teachers was the more easily influenced by training, since almost all the training was pointed most directly toward interpersonal and group collaboration among staff.

School K02. This school, which received its first training after the 1970 questionnaire administration, showed up very high in the 1972 ranks, even though it had earlier been in the tvc category. However, this school did not really make a soaring leap upward, as we can see by examining its actual scores. On actual collaboration, K02's score of 129 ranked third in 1972, but this same score at first posttest would have ranked last. On involving students, K02's score of 7.1 ranked first; the same score at first posttest would have ranked last. On incidence of innovations, K02's score of 43 tied for first place; the same score would have been a poor second at first posttest. The fact that K02 was almost TVC by the time of the second posttest probably gave it a boost in relation to the other schools by the time of the second posttest, but it remained far below the levels attained by the TVC schools on all three variables soon after their own training, and far below the tVc schools on two of the variables. The performance of this school does not negate the conclusions represented in Figure 7-1.

Saturen's original study turned up two more findings that we think it important for schools and consultants to know about. We shall describe them briefly.

Volunteering for Training

All the schools that received training in this project were volunteers. It turned out that all of the six schools that agreed before 1970 to undergo training scored above the median of the 30 schools on variety!* This seems a good indication that schools that let themselves in for this kind of outside intervention are likely to be above average on readiness to express disagreements. This works in favor of the intervener if the other conditions are right. It also means that organizational innovations tested with success among schools that volunteer for them may not work as well, without modification, among schools that do not freely volunteer.

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* We have also noted that K02, which did not volunteer for training until 1970, had low scores on variety in 1968 but much higher scores by the time it volunteered for training.

Attraction to School

Another dependent variable, not otherwise reported here, that Saturen investigated was that of attraction to the school or how much employees felt attached to the schools in which they worked. It was assessed by this single item:

Item 61. If you were to change to a new job during the next three years (in or out of education) where would you want it to be? (Mark one.)

( ) Still in my building.
( ) In this district.
( ) In this part of the state.
( ) In this state.
( ) In this part of the nation.
( ) Anyplace.
( ) Don't know.
( ) Can't imagine changing in the next three years.

Saturen tabulated the percentages of teachers-and-others checking the first alternative (still in my building). In 28 of his 30 schools, no more than one-third marked that alternative! The highest percentage (in school K12) was only 57.* In view of the fact that organizational development is a long-term process, requiring a year to make a good start and two or three years to bear its best fruit, Saturen's finding seems to us one more reason that organizational change and improvement in schools is as difficult as it is. If no more than a third of the teachers (in this case, moderatesized cities without severe social problems) want to stay in their school for as long as three years, this fact, it seems to us, increases the difficulty of winning their commitment to an arduous program of work that may not recompense their efforts until after they hope they will be gone. This is one more reason, too, that we are surprised to be able to display as much evidence of effects of training as we do in this book.

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* See Appendix 7-D for mean responses of all elementary schools in Kent and the mean responses in the Auburn and Federal Way districts to item 61 for all years it was administered.

On the other hand, these data give us hope that training for organizational development can have salutary effects even in the face of very short-term commitment to the school on the part of a majority of teachers. We list below the three schools in Saturen's sample that showed (on numerous variables) some of the best profit from training, along with the percentages of staff saying they wanted to be "still in my building" three years hence:

School	Percentage attracted
K12	57
E05*	47
E07	14

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* The full stories of schools E05 and E07, renamed Palmer and Spartan, respectively, are told by Schmuck, Murray, Schwartz, Smith, and Runkel (1975).

If these schools were able to make unusual and lasting changes in their organizational functioning (as the evidence to date shows), even though percentages of three-year commitment reached as low as 14 even after training this gives us hope. Maybe most people are willing to work hard with a group they believe is making progress despite a short-term view of their own tenure. Perhaps, as we argued in Chapter 3, the satisfactions ordinarily found in schools are so scanty that a noticeable increase is enough to elicit energy and commitment to a group task despite the possibility of missing out on the longer-term payoffs.

Illustrative Techniques for Increasing Readiness

Readiness need not be left to fortune. Though some schools at any given time are in a state of low readiness for major organizational change and others are in a state of high readiness, it is not true that the former are forever doomed and the latter forever blessed. Nor need the school with readiness wait for the "right kind of people" to join the staff before it can hope to achieve higher readiness for change. Almost any school, we believe, can heighten its readiness.

When Saturen left the employ of CASEA, he joined the Adams County Mental Health Center as a consulting psychologist to a school district near Denver, Colorado. He took with him, of course, the lessons he had learned from the work we have been describing. Much of his new work entailed introducing training for organizational development into the school district. He knew that readiness on the part of a school or other subsystem could enable OD training to be a fruitful success or a barren failure. He knew, too, that readiness could be raised where it was low. We describe here some of the strategies Saturen and his colleagues* have used in the

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* Steven Saturen and Richard Helgeson worked out jointly the strategies described in this section. Peg Blackmore and Molly O'Brian joined them in planning and carrying out specific training designs.

Colorado school district to heighten readiness and increase the chances of success for later training interventions.

Courses to Introduce Values, Theory, and Technology

Saturen and his colleagues first sought entry for OD in their district by conferring with the superintendent and other administrators. They described the potential of OD for enabling them to adopt new roles and methods in their capacities as educational leaders. Mutual goals were to improve relationships and coordination of efforts among central office departments and also between them and the twenty-six schools.

After several demonstration workshops attended by all central and local administrators, Saturen and colleagues offered two courses to introduce OD more widely to persons in various jobs throughout the district. They were attended for 30 hours by 38 people, including teachers, counselors, principals, and central office personnel. A key feature of the courses was giving participants the assignment of developing proposals for using OD technology to solve problems they faced in their daily work. Instructors required participants to demonstrate that they gave help to others and received help from others in designing their proposals. This collaborative work "broke the ice" for the participants and heightened their readiness for other collaborative work later.

Workshops for Curriculum Development

During the initial courses, many of the more enthusiastic participants were central-office coordinators of curriculum. Part of their job was to assemble groups of teachers from different schools to review and develop courses in specific subject matter. When the coordinators invited Saturen and colleagues to help them design and implement these planning sessions, there emerged a second major source of entry for OD throughout the school district.

In the curriculum planning workshops, the consultants used a goal-setting procedure for promoting collaboration and discussion of disagreement; they asked each participant to think of the ideal classroom for his or her subject matter. Next, each participant chose a partner whom he or she did not know very well, and each member of the pair illustrated his or her ideals on newsprint. The consultants gave each partner a different colored felt-tipped pen. After about thirty minutes, consultants asked members of each pair of teachers to talk for a while about how they worked together and then to describe their products to others. The audience was able to see quickly how the work had been divided between the members of each pair by looking at the colors of ink. Consultants asked the group to discuss the problems and benefits of collaborative work. This exercise made collaboration less mysterious for participants, enabled participants to discover the benefits and rewards that others found in collaboration, and made it legitimate to express frustrations and discontents in trying to achieve a collaborative product.

Surveys of Local Needs

A third strategy to develop readiness has been designing and administering surveys and feeding back the results. Saturen and colleagues launched OD training in several schools by asking students and staff members to indicate on a standard form their perceptions of their school and their wishes regarding change. In this way, Saturen and colleagues learned very quickly about norms regarding variety and collaboration and could design interventions according to readiness and needs expressed by staff members. This technique also helped to develop readiness by making clear to staff members and students the incongruency between where the school was and where they wanted it to be.

Collaborating with Teachers in Designing Local Workshops

Several participants in the initial district-wide courses undertook the project of planning building-level workshops for staff development. Saturen and the other instructors exhibited the plans of the participants to all staff members of those schools as a way of revealing variety of the staff's resources and as an opportunity to promote collaborative norms. Then participants and instructors joined forces to put some of the plans into practice. In one high school, several staff members of the school wanted to create school-wide task forces to foster better communications, decision making, and problem solving. Instructors capitalized on the receptivity of administrators by encouraging them to set aside several mornings for faculty to meet together without students. Instructors helped design the first meeting to encourage staff to meet in cross-departmental groups and to consider their inclinations toward forming committees to address school-wide issues. Most groups were convened jointly by a member of the faculty and one consultant from outside the school staff. Following is part of the plan consultants developed to provide impetus for forming a decision-making task force.

Consultants asked participants to form subgroups with others whom they didn't know. Consultants described several styles of making decisions (by one, few, majority, consensus, and unanimity) and presented a list of possible decision makers (including principal, other building administrators, counselors, teachers, superintendent, parents, students, school board, etc.). They then distributed to each sub-group some fictitious case studies that resembled, nevertheless, actual situations that faced the school. Each group appointed a recorder and monitor, and then decided by consensus how they would prefer to handle a series of situations. Two of the descriptions of fictious situations are reproduced below.

> Case 1. Smoking
> Several complaints have been heard lately about the school's policy of suspending students for three days whenever they violate the no-smoking rule. A petition protesting the policy has been signed by four hundred students; a group of parents has asked for a hearing with the school board to air their objections to the rule. Many parents feel that if they allow their children to smoke at home, the school has no right to deprive them of school attendance. In addition to parents and students, several teachers have reported to administrators that it works a hardship on teachers to have students missing three days of class. Administrators see the no-smoking policy and the penalties involved as necessary evils to keep smoking from getting totally out of hand.

1. Should a different smoking policy be created?
2. If so, who should make the policy?
3. If not, then what? How should the dissatisfaction be handled?
4. By what method should the decision be made?

Case 2. Student Dissatisfaction

Mutor High School is faced with problems of destruction and theft of personal and school property, book losses totaling thousands of dollars, garbage strewn around the school grounds, non-attendance in classes, and apathy in student organizations. The staff finds itself scrambling to cope with these issues. So far, the main strategies are for individual teachers and administrators to spend time policing various areas and investigating prior cases to detect who might be responsible.

1. What can be done to alter the problem behavior?
2. Who should decide what to do?
3. By what method of decision making?

After working through these fictitious problems, the subgroups discussed how they had worked and reported their deliberations to the total group. Consultants then asked the staff to consider the need for a school-wide task force in decision making and report their recommendations to the rest of the staff. At the end of the day, Saturen passed around sign-up sheets to assess interest of all the faculty for joining a task force. Fifty-eight out of ninety participants volunteered to join one. This design seems useful to promote norms for exposing variety and working collaboratively before a school considers committing itself to a full-scale OD program.

In-service Training in Classroom Group Processes

Many teachers responded to the needs-assessment surveys by requesting help in classroom management. Saturen and colleagues viewed these requests as a further opportunity to promote OD by encouraging teachers to assist one another in generating multiple solutions for mutual problems. Instructors prepared 30-hour courses of study for groups of teachers. During group meetings, instructors proposed techniques for diagnosing and intervening into the social structure of the classroom. Instructors offered the model developed by Richard and Patricia Schmuck (1974) for understanding developmental stages of classroom groups. As teachers became aware of the stages of inclusion, control, affection, and adaptability in the development of work groups within their classrooms, they began to be aware of the advantages of collaborative effort. They then began to think of the advantages of collaborative effort for themselves and of developing their own work groups.

Workshops for Team Building

The sixth strategy currently being used to promote readiness in the Colorado district is that of offering training to groups who work as a team or who desire to do so. Whenever possible, Saturen and his colleagues arrange to train two or more teams simultaneously so that they can benefit by watching one another and offering suggestions.

Norms governing direct expression of feelings are particularly important to these groups. Sometimes teachers misuse opportunities to confront one another's feelings. Resentments that have built up from past misunderstanding are dumped out of the "gunny sack" and defended, producing a maladaptive cycle of attaching blame rather than building understanding. Trainers must assure participants that they will not permit destructive accusations in the guise of openness. Openness can be guided constructively by emphasizing communication that is precise and checked out by two-way feedback.

A technique we call sculpturing has been particularly useful for promoting norms of constructive openness in teams. Each team member takes a turn as group sculptor. The sculptor's task is to arrange self and teammates in a physical posture that represents how the sculptor sees them all working together or how he or she would like to see them do so. Usually, people are placed near or distant to one another depending on the sculptor's perception of their emotional closeness, and the physical dimension of elevation (e.g., placing people standing on a chair versus sitting on the floor) is used to represent the sculptor's perceptions about influence. Time is taken to encourage each participant to describe his or her feelings during each sculpture. Often this activity is followed by a procedure for making group agreements to determine directions of change that all teammates wish to pursue. This strategy seems very effective for helping participants become aware of five important things: (1) the unused resources of others, (2) constructive ways to describe feelings, (3) how resentment and distrust deter collaboration, (4) the profits in objective communication, and (5) how small risks can be used to explore possible realms of collaboration with others.

Many other consultative designs, of course, can be used to heighten readiness for change. An outside consultant is almost always necessary, to teach and model for staff members the skills they will need as individuals and as groups to enable them to relinquish their present norms and lay hold of suitable new norms, however gropingly, during the confusion of the transition period. It is a rare staff that on its own can begin acting with new skills merely because of perceiving the need.

Recapitulation of Chapters 5, 6, and 7

Substudies in three chapters--5, 6, and 7-- have now told us in three different ways the same story about the effects of training for organizational development in the presence of certain moderating conditions. Training in the Kent project put strong weight on interpersonal communication and problem-solving skills, with smaller admixtures of process consultation and data feedback. Amounts of training in this project were small, ranging only from 12 hours to 46.* Our data show that this particular sort of training undertaken under the wrong conditions can leave a school worse off than before, especially when the amount of training is less than about 24 hours; but that this sort of training, even in amounts as small as 26 to 46 hours, can have salutary effects when undertaken under the right conditions. The three chapters have given us some strong suggestions about the right and wrong conditions; we shall recapitulate them here.

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* --The only schools examined by Saturen that received more training were E05 and E07 which received about 90 hours of training.

Communication, Openness, and Responsiveness

In Chapter 5, we divided the Kent elementary schools into two clusters. Schools in cluster 1, by definition, were those higher on communication (test A or D) than on openness (test B or E). Schools in cluster 2 were defined as those scoring in converse order on these two tests. Schools in cluster 1 when defined by scores on tests A and B had mean standard scores on the third variable, responsiveness, that were somewhat higher than those in cluster 2 in two out of three years. Schools in cluster 1 when defined by scores on tests D and E had mean scores that were considerably higher than cluster 2 in one of two years. It was also the case that trained schools did a little better on responsiveness in all years than did untrained schools.

However--and this is the important part of the story--effects of training were very different in the two clusters. We divided the schools into four categories--trained and untrained in cluster 1 and trained and untrained in cluster 2. We then examined the mean scores on responsiveness in these four categories. In four of five instances,* the biggest difference among the four categories was that between trained schools in cluster 1 and trained schools in cluster 2. The trained schools in cluster 1 showed a high positive (above average) mean on responsiveness and the trained schools in cluster 2 showed a moderate negative (below average) standing--

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* --the five instances being the administration of test C in three years and test F in two.

see Tables 5-12 and 5-13 for details. The other two categories, untrained schools in clusters 1 and 2, had mean responsiveness scores between the two extremes of the trained schools. The moral of the story is that training can be associated with above average responsiveness and also with below average responsiveness, depending on the levels of communication and openness. Under certain conditions, to put it differently, training for organizational development can be an excellent investment; under other conditions, it can become a liability.

Communication, Training, and Collaborative Structure

We told in Chapter 6 how Wyant (1974) in 1970 and 1972 examined the performance of trained (TRND) and untrained (UNTD) and collaborative (COLL) and non-collaborative (NONC) elementary schools on six tests of communication. He found that the collaborative schools did a little better on all six of these tests in both years. It was also true that the trained schools did better than untrained schools in six of nine occasions of assessment.*

However--and here we return to the thread of our story--the effects of training were different in the two clusters (collaborative and non-collaborative). The differences between clusters, in fact, differed with different tests.

Test Ia assessed communication during emotion (as did test A in Chapter 5). Test IIa dealt with orderliness and thoroughness in meetings.

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* The nine occasions were the administration of tests Ia, IIa, and IIIa in 1970 and again in 1972 and of tests Ib, IIb, and IIIb in 1972.

On both these tests in 1970, the performance of schools in the clusters formed by classifying schools as to whether trained or collaborative was as follows: untrained collaborative schools showed better communication than trained collaborative schools (contrary to prediction) and untrained collaborative schools did better than untrained non-collaborative schools (in agreement with prediction). In symbols, we express this as:

UNTD-COLL > TRND-COLL and

UNTD-COLL > UNTD-NONC.

Test IIIa dealt with the effectiveness of meetings including clarity of decisions and other factors. On this test, the relative performance of clusters in 1970 was:

TRND-COLL > UNTD-COLL > UNTD-NONC.

In 1972, the orderings of clusters on these three tests (omitting school K02) was similar, though not exactly the same:

UNTD-COLL > TRND-COLL > UNTD-NONC for test Ia,

UNTD-NONC > UNTD-Coll > TRND-COLL for test IIa, and

TRND-COLL > UNTD-COLL > UNTD-NONC for test IIIa.

Test Ib, administered in 1972, dealt with variety--welcoming novel ideas even when they are discomfiting. The ordering on this test was the same as that for test Ia in 1972. Other "b" tests had patterns dissimilar to the corresponding "a" tests.

Overall, we see that training combined with collaborative structure put schools at the top on test IIIa (effectiveness of meetings) in both years, but in the middle of schools in the district on tests Ia and Ib (communication during emotion and variety) in both years, and at the bottom on test IIa (thoroughness in meetings) in both years. In fact, the mean standard score for TRND-COLL schools on test IIa in 1970 was negative, though the deficiency was not large, the standard score being only -0.11.*

So we see again that training can have a deleterious effect in certain ways under a certain condition. In this case, the condition is that of striving to achieve collaborative structure of the multiunit sort, and the effect is that of diminishing the thoroughness with which the business at meetings is worked through. We interpret this pattern of results within the stress of a school making strong organizational changes. Under this stress, the training probably helped the TRND-COLL schools communicate openly about their frustrations (test Ia), and it probably helped them clarify their conclusions and decisions during meetings (test IIIa). The training probably helped the staffs reach out to form the new communication linkages (test IIb) necessitated by the new structure, and it probably helped them to form ideas about the problems they were encountering and what measures could be tried to deal with them (test IIIb). But the severe pressures to make the new structure work, along with the encouragement to move ahead boldly that the training probably added, no doubt caused them to give shorter shrift to the communicative procedures in their meetings than they might have otherwise, and the training these schools received apparently failed to enable the staffs to counter these pressures during their meetings. Our supposition is that some of the decisions these staffs made in their meetings had an illusory clarity and that they had to re-cycle some of them. But we have no data on this point.

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* On no other test or year did the mean of the TRND-COLL schools fall significantly below average. The lowest means of these schools were those of -0.01 on test IIa in 1972 and of -0.02 on Ib in 1972. The one school in TRND-NONC in 1972 also had some low scores, but we are putting little weight on these because of the single case. For comparison with the TRND-COLL schools, we can also note that UNTD-NONC schools had means on test Ia of -0.09 in 1970 and -0.06 in 1972 and on test IIb of -0.24 in 1972. The means of the UNTD-COLL schools, though often very low, never fell into the negative. For contrast, the highest scores among each of the three clusters of tests were these: .36 for UNTD-COLL on test Ia in 1970, .10 for UNTD-COLL on test Ia in 1972, and .22 for TRND-COLL on test IIb in 1972. It is also worth noting that the mean standard scores of clusters of schools in Wyant's study showed a much smaller range up and down than the clusters in Chapter 5 of Saturen's clusters in the present chapter.

Looking only at the schools with 27 or more hours of training, Wyant also found that the TRND-COLL schools exceeded the UNTD-COLL schools on all six of the tests in 1972. And on two of the three "a" tests, the means of the TRND-COLL schools also exceeded the means of the UNTD-COLL schools in 1970. In contrast, the schools with lower amounts of training (six to 22 hours) had negative means on eight out of the nine testing occasions!

Here again, we find a condition that makes an important difference in the effectiveness of training for organizational development. Training of less than about two dozen hours put the means of trained schools on Wyant's tests (all of them) below the mean of untrained collaborative schools, while more training than that put schools above the untrained mean. Furthermore, mean scores of the highly trained collaborative schools on the "a" tests went up from 1970 to 1972, while those of untrained collaborative schools went down. The advice to schools and consultants is obvious.

Variety, Collaboration, and Training

In the present chapter, we have seen how Saturen divided the elementary schools of four districts into those above and below the median on variety (V) and readiness for collaboration (C), categorized them also into trained and untrained, and then examined the performance of the resulting clusters on four outcome variables: (1) perceived influence within the staff; (2) actual collaboration in building curriculum, in selecting teaching methods, or in selecting subject matter; (3) involving students in developing rules for student conduct; and (4) incidence of undertaking innovations. Overall, high-V schools did little better than low-v schools on these variables, and high-C did little better than low-c.

However--and here we go again--the effects of training were very different with certain combinations of V and C than with others. Training put schools having both variety and readiness for collaboration above average, (the TVC schools) at first rank on five out of seven testing occasions* and at second rank on the remaining two.

---

* The seven occasions were the four tests at the first posttest and the three at the second posttest.

And on most of these occasions, the means of the TVC schools stood far higher than the next highest.

When schools were high only on variety, however, and not on readiness for collaboration, training seemed to depress scores on the outcome variables (of these TVc schools) to levels below the average of all schools. Many schools in this group did worse than untrained schools, and worse than schools with training but low on variety as well as on readiness for collaboration (that is, worse than the Tvc schools)! The TVc schools, in fact, had negative means on all three of the outcome tests administered at the second posttest and also on incidence of innovations on the first posttest.* Again, we see that training under the wrong circumstances can depress performance instead of improving it.

As in the case of the TRND-COLL schools in Wyant's study (Chapter 6), our interpretation of the plight of the TVc schools is that they were stumbling over their own feet. Spurred by a small amount of training and by their own openness to variety, they were making efforts toward actual collaboration of various sorts at first posttest, but their low readiness for collaboration probably caused many of those efforts to founder. These schools contributed more than their share to the general lowering of scores on the outcome variables by 1972.

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* Among seven clusters of schools assessed on the several outcome variables at the two posttests (yielding 45 means in all), 24 of the assessments gave means below the average of all schools. Of these 24 negative means, we should note that 19 came from clusters without training. The one cluster that had negative means on all tests at both posttests was tvc--no training, low on variety, and low on readiness for collaboration.

The recommendation here is to get V and C well above average (using methods like Saturen's methods described in this chapter) before undertaking large steps in organizational change. Above all, look out for high V with low c!

Putting together the findings of all three chapters, it seems judicious to advise schools and consultants as follows: Before undertaking training for serious organizational change, be sure that readiness to express variety and readiness for collaboration are high. If one is not high, take steps to elevate it. Monitor carefully the openness in the staff and their skill in communicating during emotion. If either of these is low, use training to raise it, especially communication during emotion; otherwise, readiness to act may be insufficient. (We say this partly because elevating responsiveness by training depends on having elevated openness and communication.) Finally obtain commitment from the staff as early as possible to a sufficient course of training--no less than three full days, and preferably ten or more, appropriately spaced and focussed.

And the story is still not ended. In the next chapter, we shall examine functioning at the subsystem level. There again, we shall meet conditions under which the training in Kent had good results and conditions under which it had little effect. In Chapter 10, we shall see how elementary schools in Kent strove for innovation. Sometimes they succeeded, sometimes they failed, and sometimes they tried again. We shall see there again the effects of different amounts of training. Chapter 14 will bring together the entire array of findings.

Chapter 8

SUBSYSTEMS: EFFECTS OF ORGANIZATIONAL TRAINING ON ORGANIZATIONAL PRACTICES

Bell and Runkel

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Appendix 8-D Means of trained and untrained elementary schools in Kent and of the elementary schools pooled in the Auburn and Federal Way districts on the questionnaire items relating to second-level skills. mentioned on pages 39 and 48.

Chapter 8

SUBSYSTEMS: EFFECTS OF ORGANIZATIONAL TRAINING ON ORGANIZATIONAL PRACTICES

Bell and Runkel
(final)

In the last three chapters we gave our attention to the sort of interpersonal communication and abilities we called "first-level" skills in Chapter 3. In Chapter 5, we discussed certain conditions under which interpersonal responsiveness among teachers was more likely, especially when organizational training was combined with a strong readiness to persist in communication during emotion. In Chapter 6, we found that when schools with collaborative structure received enough training, they showed greater openness of communication for a longer period of time than other schools. In Chapter 7, we saw that OD training produced several heightened abilities in schools only when certain preconditions were right; namely, when tenacity in carrying on emotional communication was relatively great and when the desire for collaborative work was relatively high.

In the following two chapters, we shall turn our attention to second-level skills--the skills and norms that serve to enhance the functioning of systems. In the present chapter, we shall discuss conditions under which actual collaborative decision making among teachers is more likely to occur--in particular, when (1) there is clarity on the part of the staff about the communication channels throughout the subsystem or (2) when the staff demonstrates a propensity for establishing communicative links with interdependent others. In Chapter 9, we shall see that there is some evidence for the contention that principals can share power with teachers without losing their own influence.

Second-Level Skills and Norms

To achieve success in many kinds of tasks, people often find it necessary to join with others and to coordinate their work in a cooperative manner. Many organizational tasks within schools require strong cooperative interdependence within work groups. As we noted in Chapter 3, when a group is performing work that is reasonably distinguishable from the work of other groups, and when the work requires considerably more frequent and detailed communication among members of the group than with persons elsewhere--that is, when there is more interdependence among members of a group than between them and persons elsewhere--we say that the group is a subsystem.

The subsystem concept is a vital one for OD practitioners. If a consultant hopes to bring about lasting change in the organization as a whole, he or she must, at some point, stabilize the new pattern and the subsystems that will carry the new pattern. For example, if a consultant helps a school to modify its decision-making procedures so as to increase the influence of teachers, he or she will have to modify some of the internal processes of the subsystem of teachers and also some of the processes within the subsystem of the building administrators. He or she will then need to help the two subsystems establish effective coordination between themselves. Other subsystems, of course, may also become involved--perhaps central office personnel, students, or parents. From this perspective, the subsystem is the most critical unit of structure with which the consultant can work. It is the functional unit which must become the focus of any intervention that hopes to bring about lasting change in schools or districts.

This is a strong statement. Yet we did not always hold this belief. Certainly, at the beginning of the Kent project we did not fully appreciate the importance of the subsystem as an organizational unit in planning our intervention and research strategies. While we stressed the importance of the subsystem in theory, we were not able to examine it thoroughly in actual practice, in part, because we lacked reliable measures of subsystem characteristics. Consequently, many of the results reported in earlier chapters deal with first-level changes. Yet it is interesting to note that our most encouraging results in these earlier chapters center around the changes that come closest to *approximating* second-level or subsystem changes. The present chapter looks at equally encouraging changes occurring in the functioning sub-systems of the Kent elementary schools, particularly, the subsystem of teachers.

Awareness of Communication Channels, Communication with Interdependent Others, and Collaborative Decision Making

In Chapter 3 we listed the following second-level skills as being important for subsystem functioning:

1. *Clarifying communication* throughout the subsystem and establishing communicative links with interdependent subsystems.
2. *Agreeing upon goals* within the subsystem and revising them when they no longer serve.
3. *Uncovering conflicts* within the subsystem and coping with them constructively.
4. *Improving procedures in meetings of the group*: conducting meetings so as to maintain the first-level skills

among the participants and to enable the other second-level skills to be exercised effectively.

5. Group problem solving: responding to problems in a productive, systematic fashion.
6. Making decisions by appropriate means.
7. Assessing progress: pausing periodically during work to ask, "Where are we now?"

Like our conception of first-level skills, our conception of second-level skills evolved during the project. Consequently, we found ourselves at the end of the project with responses to a host of questionnaire items written with less systematic concepts in mind. We then evaluated and grouped the various items, selecting those we believed would be the best indicators of the second-level skills we wanted to assess. Some resulting problems were that we did not have items to assess a subsystem's ability to uncover conflict, and we had fewer than four years of data on other second-level skills.

Among the questionnaire items that were administered in all four years, we found two sets we believed relevant to the first skill listed above--clarifying communication. We also found two sets relevant to the sixth--appropriate decision making. These four sets of items (to be described in detail below) provide the data for the greater part of this chapter. At the end of the chapter we shall describe results obtained from items administered only in one or two years.

Four Tests over Four Years

A two-part questionnaire item provided information on the accuracy with which a school's staff could identify functioning communication links in the school. This seems to us basic, since a staff or subgroup can hardly clarify communication at the subsystem level unless people know where the communication links are. We shall call this item test G on awareness of functioning communication channels. The two part item[*] read as follows:

Item 62. Perhaps there are some people in your organization with whom you talk rather frequently about matters important to you. Please think of people with whom you talk seriously about things important to you, inside or outside formal meetings, once a week or more on the average. Write their names below. (If there are fewer than six people with whom you talk once a week about matters important to you, write down only as many as there are; if none, write "none." If there are more than six, list the six with whom you feel your conversations are the most satisfying.)

1. ________________ 4. ________________

2. ________________ 5. ________________

3. ________________ 6. ________________

Now look back at the above question. Each name is numbered. Listed below are all the pairs that can be made among six numbers. Perhaps you know whether some of the six people talk to each other about matters important to them. Please look at each pair of numbers below, look back to see what names they represent, and circle the pair of numbers if you have good reason to believe that the two people talk to each other once a week or more about matters important to them.

1-2 1-3 1-4 1-5 1-6

2-3 2-4 2-5 2-6

3-4 3-5 3-6

4-5 4-6

5-6

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[*] The first section of this item appeared in Chapter 5 as item 7.

Appendix 8-A describes in detail the manner of calculating a score for each school from item 62. Briefly, we noted whether a respondent indicated that a pair of people talked or did not talk to each other, and then ascertained if this pair said they actually did talk to each other. We did this for all possible pairs among the persons the respondent named in the first part of the item. The respondent could guess correctly in two ways: that the pair did talk, or that the pair did not talk. The respondent's score consisted of the number of "correct guesses" he or she made. The score for the school was the mean of the scores of the individual respondents. The scores of schools, districts, and years will be described later in the chapter.

Since we derived the school's scores by tabulating the number of "correct guesses" about existing communication links, we would expect test G to be primarily an indicator of the staff's awareness of communication channels in the school. However, if the two portions of item 62 were highly correlated, this would indicate that test G was primarily an indicator of the amount of communication in the school. In fact, the average rank-order correlation between the two portions of item 62 was only .23. This value was low enough for us to infer that test G is primarily an indicator of the staff's awareness of the communication links in the school. We performed a separate analysis to ascertain the proportion of right guesses about pairs of other persons who did talk with each other versus right guesses about pairs who did not talk with each other. In general, the right guesses were comprised of somewhat more guesses about pairs who did talk than about pairs who did not. This is to be expected from the fact that the first part of the item allowed respondents to name only six persons.

Test G, consequently, indicates accuracy or awareness both about talking pairs and non-talking pairs; it is not merely an indicator of the number of persons to whom the respondent talked. Item 7, used in Chapter 5, is the indicator of the latter.

Test G indicates the accuracy of the average respondent's understanding of the communication channels which connected him or her to others. The communication channels were those carrying discussion "seriously about things important to you, inside or outside formal meetings." As such, the channels could reach beyond the immediate subsystem. Indeed, an analysis of the links by the kind of job held by each person showed us that respondents (teachers) frequently named members of other subsystems such as counselors, secretaries, and administrators. Consequently, we take test G to indicate a second-level skill. Test G tells us the extent to which members of a school know the paths through which ideas about important matters can be effectively sent or received, and paths through which they cannot. This skill goes beyond the first-level communicative skill of communicating effectively face-to-face. It moves to understanding the "communicative map" within one's own subsystem and beyond it.

Note also that this indicator tells us about the immediate viewpoint of each individual respondent. We did not, as we might have done, give the respondent a list of names and ask him or her to tell us the pairs among them who communicated. Instead, we asked each person to name those with whom he or she was in closest touch about important matters, and then asked the respondent to tell us about those persons. The result is that the indicator tells us about communication among the persons the respondent knew best. Considering this fact, it is interesting that in the school and year showing the highest score, the average respondent was correct about only 2.77 pairs out of a possible maximum of 15. We shall give further detail about scores on test G later in the chapter.

Test H on communication with interdependent others consisted of a questionnaire item* inquiring about the others with whom the respondent was interdependent in choosing teaching methods for his or her classroom. The score for the school was simply the mean number of persons the respondents named in answer to the second part of the item:

Item 45. This item concerns the choice of teaching methods you use in your classroom. Please mark "X" before the one statement below that best describes your part in deciding upon the teaching methods to be used in your classroom.

1. ___ I choose my own teaching methods without assistance or direction.
2. ___ The final choice of teaching methods is left to me, but there are others whose job includes making recommendations or suggestions.
3. ___ Within certain limits I can choose my own teaching methods.
4. ___ As a member of a group or committee, I share with others the job of deciding the teaching methods to be used.
5. ___ I do not choose my own teaching methods. They are laid down for me by others.

If you chose answer 2, 3, 4, or 5 in the question just above, you were indicating that at least some other person or persons were somehow involved in deciding upon the teaching methods to be used in your classroom. If you chose answer 2, 3, 4, or 5, please write below the names and positions of the other persons involved.

---

* Item 45, which constituted test H, was adopted from the items used by Abbott, Pellegrin, and Eidell in their Program on Innovations at the Center for the Advanced Study of Educational Administration (CASEA) at the University of Oregon. Item 45 also appeared in Chapter 6.

The positions of persons most often named by respondents were principal, reading or curriculum specialist, and the like, rather than other teachers. Although the communication in test H depends on sufficient first-level skills, we consider the test primarily an indicator of second-level skills. This is because it tells us about communicative links between members of different subsystems, in this case, teachers and resource persons. It probably reflects the use of more formal channels than did test G, and is primarily an indicator of the amount of communication taking place between teachers and others in the school.

Test I on including teachers in decision making concerns the second-level skill of making decisions by appropriate means. One item deals with making decisions about curriculum, the other with developing regulations for student conduct.* These two items were included in test I.

Item 56. Regardless of the official policy, who actually plans and develops the school curriculum? Please mark one or more choices below.

___ I don't know who actually does this.
___ Citizens' or parents' committee.
___ Board of Education.
___ Superintendent.
___ Instructional supervisor.
___ Principal.
___ Department head or grade chairman.
___ A group of teachers.
___ The individual teacher.
___ Counselor(s) or guidance director.
___ School psychologist.
___ A student committee.
___ Other; specify ______________________________

Item 63. Regardless of the official policy, who actually develops regulations for student conduct? Please mark one or more choices below.

___ I don't know who actually does this.
___ Citizens' or parents' committee.
___ Board of Education.
___ Superintendent.
___ Instructional supervisor.
___ Principal.
___ Department head or grade chairman.
___ A group of teachers.
___ The individual teacher.
___ Counselor(s) or guidance director.
___ School psychologist.
___ A student committee.
___ Other; specify ____

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[*] Both of the items used in test I were adopted from the items used by Abbott, Pellegrin, and Eidell in their Program on Innovations at (CASEA) at the University of Oregon. Item 56 also appeared in Chapter 7.

Here we used test I as an indicator of the extent to which teachers were involved in decision making. To ascertain how much teachers were involved, we counted "a group of teachers" as the favorable response to both items. Our theory argues that decisions are most effectively made when they are made as close to the operative level as possible. Our reasoning, therefore, was that decisions about curriculum and student conduct would be carried out with more commitment and more coordination in the school where a larger percentage of respondents included "a group of teachers" among those alternatives they checked in answer to these two items. Of course respondents were not penalized for also marking other choices. By our selection of "a group of teachers" as the favorable response we focused on the articulation of the subsystem of teachers in the decision making process. The score for a school was the percentage of staff giving the "favorable" response. Here are the two items of test I:

Item 56. Regardless of the official policy, who actually plans and develops the school curriculum? Please mark one or more choices below.

___ I don't know who actually does this.
___ Citizen's or parents' committee.
___ Board of Education.
___ Superintendent.
___ Instructional supervisor.
___ Principal.
___ Department head or grade chairman.
___ A group of teachers.
___ The individual teacher.
___ Counselor(s) or guidance director.
___ School psychologist.
___ A student committee.
___ Other; specify ______________________________

Test J on the use of colleagues in decision making also concerns the second-level skill of making decisions by appropriate means. It contained three items.*

Item 64. When you want to receive approval from faculty in your school for an idea you are proposing, it is sometimes helpful to enlist the support of certain individuals in your school. Please list below, by name and position, the individuals whose support for your ideas would help most in obtaining faculty support.

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________

Item 64 contributed to test J the mean number of persons mentioned by respondents in the school. It reflected how much respondents would enlist others' support during faculty decision making.

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* The items used in test J were adopted from the items used by Abbott, Pellegrin, and Eidell in their Program on Innovations at CASEA at the University of Oregon.

Items 65 and 66 of test J were alternatives 2 and 4 from item 45.

Item 65. The final choice of teaching methods is left to me, but there are others whose job includes making recommendations or suggestions.

Item 66. As a member of a group or committee, I share with others the job of deciding the teaching methods to be used.

The percentage of respondents in the school choosing one or the other of these alternatives also contributed to the score on test J.

Test J is similar to test I. The difference is that the responses to test J reflect the particular perspective of the respondent. In asking about curriculum and student council, test I asked about policies that are typically school-wide. It asked whether the school as a whole included teachers in making decisions about these policies. Test J, on the other hand, asked, in effect, "What individuals or groups do you join with in making decisions?" Test J asked whether respondents themselves joined with others to promote their own ideas or to choose teaching methods for their own classrooms. The focus of test J was upon the smaller subsystem that included the respondents themselves.

In sum, we constructed four tests* from the questionnaire items we had available from all four years. Tests G and H told us about the first second-level skill concerning communication. Test G told us the accuracy of the respondent's understanding of communcation channels. Test H indicated the extent to which respondents actually used these communication channels. Tests I and J told us about the sixth second-level skill concerning decision making. Test I indicated the extent to which teachers were involved in making decisions about curriculum and regulations for student conduct. Test J indicated the extent to which the respondent was linked with others in making decisions about teaching methods (items 65 and 66) or about gathering support for a new idea (item 64). All four tests deal with coordination within and between subsystems.

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* For each of the items in tests G, H, I, and J, Appendix 8-A contains a tabulation and graph for each of the items separately, showing means of trained and untrained elementary schools in Kent and of the elementary schools pooled in the Auburn and Federal Way districts.

Method of analysis. We pointed out earlier how vital the concept of subsystem is for anyone wanting to understand organizational change in the school or district. It is helpful to think of a subsystem in an organization as a temporary interaction of a cluster of humans for the purpose of carrying out some function.

The major goal of our OD training and consultation was to bring about improvements in the functioning of the various subsystems of the school--that is, to build up their second-level skills--which in turn would permit the school to function in a more efficient, flexible, effective manner. This view led us to predict that schools that achieved improvements in the functioning of their subsystems, as a result of organizational training, would be different from schools that failed to achieve improvements. This difference is analagous to the difference predicted in Chapter 5 between schools working under a new set of first-level norms and those working under an old set of norms. Put most simply, we had hoped to find systematic differences between trained and untrained schools in their scores on tests G, H, I, and J.

In fact, when we compared the scores of trained schools with untrained, we found that OD training increased (1) awareness of communication links (2) communication with interdependent others, (3) use of teachers in school-wide decision making, and (4) collaboration in decision making. We also found a relationship between the staff's awareness of communication links and their ability to profit from OD training.

Just as in Chapter 5, we chose to compare the similarities and differences among schools on our four tests by using the method of nonmetric multidimensional scaling--specifically, the Guttman-Lingoes MINISSA - I(M) computer program.* In this analysis, we followed the same procedure employed in Chapter 5. First, we calculated a raw test score for each school. Second we converted these raw test scores to standard scores by subtracting the mean of the district from each raw test score and dividing this difference by the standard deviation of the raw scores. Third, we calculated similarity scores between schools by computing the correlations within every pair of elementary schools in Kent over the four tests, using the standard scores. We fed these similarity scores or correlations into the computer along with the MINISSA instructions, and the computer gave us the plots shown in Figure 8-1.* (For a more detailed description of this multidimensional method of analysis, see the discussion in Chapter 5.)

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* For documentation and background on the MINISSA program, see Guttman (1968), Lingoes (1965, 1966a, 1966b, 1967, 1968, 1971), Lingoes and Roskam (1971), and Roskam and Lingoes (1970). The more important options of the program were set as shown below; the labels of the options (e.g., 4b and MIND) are those used in the preface to the program itself.

4b. Program determines the minimum of dimensions (MIND = 0).

4c. Largest number of dimensions set at three (MAXD = 3).

4d. Inputs are correlation coefficients--that is, similarities (ISIM = 1).

4g. Kruskal's stress not to be minimized (IFGLK = 0).

4h. Configuration not to be input (IFCONF = 0).

41. Euclidean metric (IFE = 0).

Two clusters of schools in Kent. Following the strategy used in Chapter 5, we looked immediately to see whether clustering had occurred. The clusters were not as distinct as those found in Chapter 5, but we were able to identify two clusters of schools over the four years.* The clusters were distinguished by the relative elevations of schools' scores

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*Initially, we had planned to use five tests in the multidimensional analysis of the data and had constructed a test on the accuracy of the staff's perceptions of the principal's goals. However, because there were numerous missing data in the fifth test, we dropped it from the analysis. Unfortunately, we were not aware of the fact that so many of the data were missing until after we had included the test in the input data for the MINISSA program. Consequently, while we have chosen not to include this test in the discussion of the results, it did have some influence in the placement of certain schools in certain years on the plots shown in Figure 8-1. The influence of this test was minor, however, because of the numerous substitutions of mean values for missing data. This is the reason we chose not to spend money on a revised MINISSA run.

*With the plan used, all solutions ran only to two dimensions with less than 25 iterations. The coefficient of alienation and values for Kruskal's stress are:

Plot	Coef. of alineation	Kruskal's stress	Statistical significance by Spence & Ogilvie (1973)
1968	.0012	.0008	Significant
1969	.1017	.0834	Significant
1970	.1276	.1009	Significant
1972	.0937	.0731	Significant

on tests G and H. Figure 8-1 shows the way schools fell on the MINISSA plots. We have drawn a line through the plot for each year, dividing the schools that scored higher on test G than on test H (Gh), from those scoring higher on test H than on test G (Hg). The two clusters were least distinct in 1968 but later became more distinct, with the most marked separation visible in 1972.

In contrast to the plots in Chapter 5, the schools* in Figure 8-1 do not fall in a simple circular arrangement. Especially in later years, some schools departed from the periphery and fell toward the center of the circle. The reason for this is that we gave the computer four tests to use in computing similarities among schools, in contrast to the three used in the analysis of Chapter 5. Because of the mathematics of the MINISSA program, it is inevitable that three tests will place schools on the periphery of a circle, but it is not inevitable that four tests will do so. In fact, if the similarities among schools had been more complex than they turned out to be, the plots of Figure 8-1 would have been much less circular and more cloud-like than they are. The plots in Chapter 5 were divided into six regions; in this chapter, because we used four tests, there was a possibility of 24 regions. For simplicity, we have chosen only to identify those regions that contrast tests G and H.

The MINISSA plots gave us the hint that we should look more closely at the characteristics of the Gh and Hg clusters. Using the

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* For simplicity, we drop the letter designating the district in the figure, but retain it in the text.

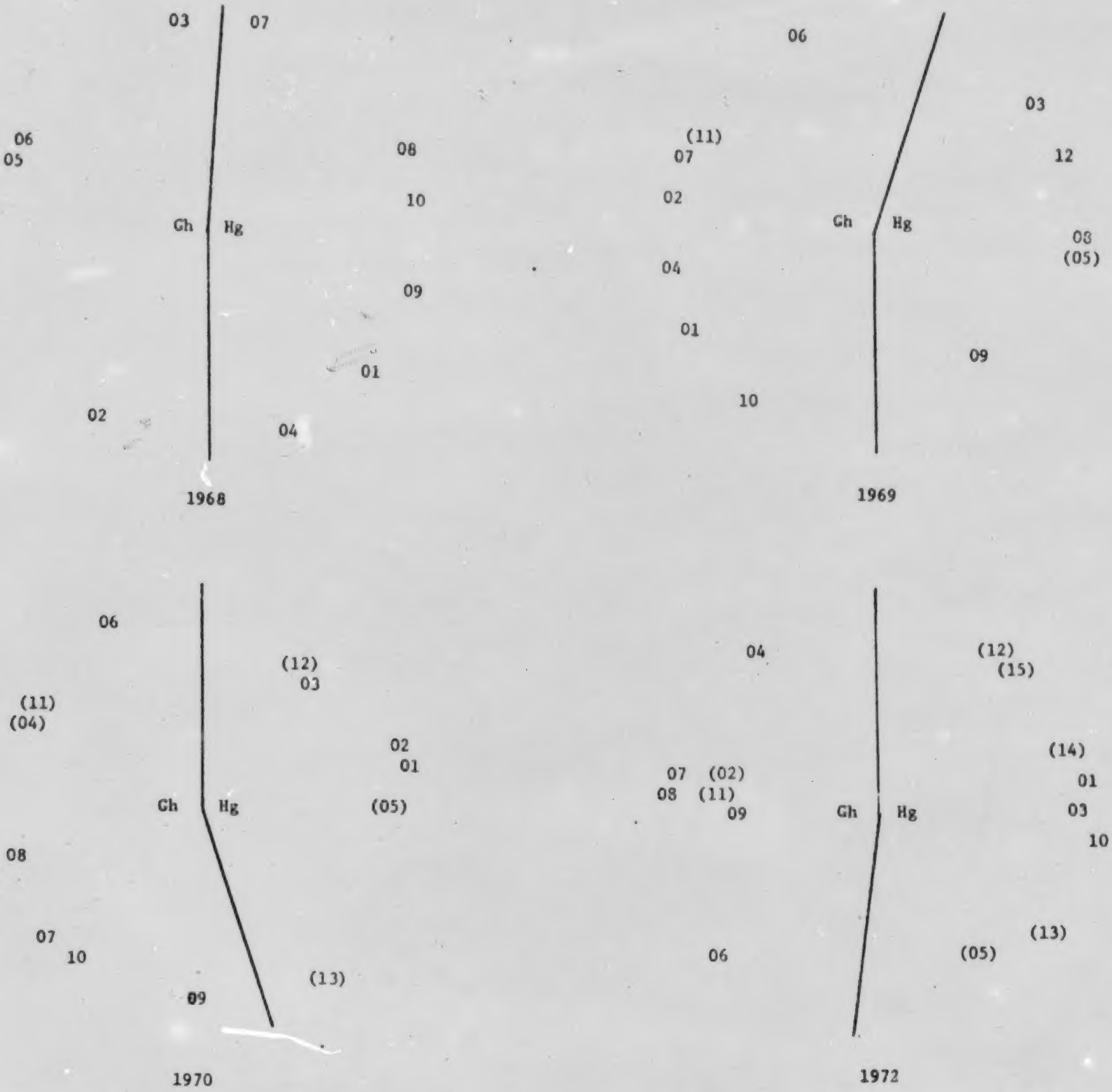

Figure 8-1

Similarities among Kent elementary schools in respect to standard scores on tests G, H, I, and J.

Gh Each plot is divided into two parts, each with a label designating the relation of tests G and H. For example, the left-hand region consists of those schools whose scores on test G were higher than their scores on test H.

(11) A school whose number appears in parentheses received training or consultation at some time previous to the year shown.

MINISSA plots we constructed Table 8-1, which gave us considerable evidence concerning the difference between the two clusters and the fact that the difference was related to training. Table 8-1 shows the means of the two clusters. To construct the table, we first grouped the schools according to cluster: in the table, we use the label Gh to mean schools that had higher standard scores on test G than on H, and Hg to mean schools that had higher standard scores in test H than on G. We then divided the schools again according to whether they had or had not received OD training. We also divided the schools into subgroups by year: 1969, 1970 and 1972. The mean standard scores listed in Table 8-1 are the means for each subgroup of schools in the indicated year. The scores used to construct table 8-1 are found in appendix 8-B.

Upon comparing trained and untrained schools in Table 8-1, we note that: (1) within cluster Hg, the means on test G, compared year by year, were higher for trained schools than for untrained schools in 1969 and 1972, and equal in 1970; (2) within cluster Gh, the means on test H were higher for trained schools than untrained in 1970 and 1972, though not in 1969; and (3) within cluster Hg, the means on test H are higher for trained schools than for untrained only in 1972--they were equal in 1970 and lower in 1969. Upon comparing clusters in Table 8-1, we note that: (1) every one of the three means on test G of the trained schools of cluster Gh (the grouping at the upper left of the table) was higher than any other mean shown in the table; (2) trained schools in cluster Gh scored higher on their higher test (G) than trained schools in cluster Hg did on their higher test (H) in all years; and (3) untrained schools in cluster Gh scored higher on their lower test (H) than untrained schools in

Table 8-1. Means of standard scores of trained and untrained elementary schools in Kent on tests G and H within clusters Gh and Hg

	Cluster Gh	Cluster Hg
	Trained schools	
Higher test	(Test G)	(Test H)
	2.54 in 1969 (1)[*]	1.05 in 1972 (5)
	1.38 in 1972 (2)	.91 in 1970 (3)
	1.37 in 1970 (1)	.54 in 1969 (1)
Lower test	(Test H)	(Test G)
	1.06 in 1970 (1)	.33 in 1972 (5)
	.28 in 1972 (1)	- .06 in 1970 (3)
	- .80 in 1969 (2)	- .39 in 1969 (1)
	Untrained schools	
Higher test	(Test G)	(Test H)
	.34 in 1970 (6)	1.03 in 1969 (4)
	.18 in 1969 (6)	.91 in 1970 (3)
	- .09 in 1972 (5)	- .57 in 1972 (3)
Lower test	(Test H)	(Test G)
	.33 in 1970 (6)	- .06 in 1970 (3)
	- .64 in 1969 (6)	- .81 in 1969 (4)
	- .82 in 1972 (5)	-1.32 in 1972 (3)

[*] The numbers in parenthesis indicate the number of schools included in the specified subgroup for the year indicated.

cluster Hg did on their lower test (G).

In sum, (1) the clustering was relevant to training, with trained schools in cluster Gh showing higher means on test G than appeared in any other grouping on either test, and with trained schools in cluster Hg showing higher means on test G than untrained schools except for 1970, when they were equal; and (2) test G showed greater separation between clusters and between trained and untrained schools than did test H.

Cluster Gh was the one in which schools scored higher on awareness of functioning communication channels (test G) than on communication with interdependent others concerning choosing teaching methods (test H), and cluster Hg contained schools with the converse relation between the tests. It turned out that cluster Gh contained the schools scoring highest on either test; that is, within cluster Gh, the means of trained schools on test G were higher than any other means in the Table 8-1--higher even than any means on test H in cluster Hg. Further, trained schools were more different from untrained schools, on both tests, within cluster Gh than within cluster Hg. We shall see later how training and clustering on tests G and H affected outcomes on tests I and J.

Before turning to tests I and J, let us look at another display of mean scores on test G in relation to training. Table 8-2 presents *raw* scores (not standard scores) on test G. The figures in the table can be read directly as the number of communication links correctly perceived by the average staff member in the school. For example, in the highest-scoring school in 1968, the average staff member perceived a little less than one link correctly.

Table 8- 2 shows that the means of trained schools (regardless of

Table 8-2a. Highest, lowest, and mean raw scores on test G among trained and untrained elementary schools in Kent over four years

	1968	1969	1970	1972
Highest school*	.80	1.56	1.38	2.77
Mean of trained schools	none	.73	.75	1.27
Mean of untrained schools	.20	- .06	.53	.46
Lowest school**	- .30	-1.24	- .10	- .33

* The highest school in every year was a trained school except in 1968, when there was no trained school.

** The lowest school in every year was an untrained school.

Table 8-2b. Means on test G among elementary schools in three districts over four years

Kent	.20	.05	.59	.87
Auburn	- .04	.17	.67	- .12
Federal Way	.15	- .08	.13	.42

cluster) were higher in every year than the means of untrained schools and (as explained in the footnotes in the table) that the highest-scoring were trained schools (in every year in which there were trained schools) and the lowest-scoring schools were untrained schools in every year. Furthermore, the means of trained schools in Kent not only exceeded the Kent grand mean for elementary schools in every year, but also exceeded the grand means of the other two districts in every year. In contrast, the means of untrained schools in Kent fell generally in the same range as the grand means in the other two districts. Tables 8-1 and 8-2 clearly show that test G, concerning awareness of functioning communication channels, indicated a dimension on which training made a difference as well as one which distinguished clusters among both trained and untrained schools.

Effects on decision making. We now turn to outcomes on tests I and J, concerning decision making. Were the outcomes on these two tests different between the two clusters? Did the training make a difference on these two tests? We turn first to test I on including teachers in school-level decision making. This is the test that ascertained the percentage of school staff that mentioned "a group of teachers" (1) among those they said actually planned and developed the school curriculum or (2) among those they said actually developed regulations for student conduct.

We examined standings on test I in much the same manner as the standings on tests G and H. Within each year and cluster, we calculated the means of trained and untrained schools. The results are shown in Table 8-3. The effects of training are clearly evident in the table. In all three years in which there were trained schools, the trained schools scored higher than the untrained schools, irrespective of cluster.

Table 8-3. Mean standard scores of groups of elementary schools in Kent on test I, grouped according to cluster Gh or Hg, year, and whether trained or untrained

		Cluster Gh		Cluster Hg		
		Mean on test I	No. of schools	Mean on test I	No. of schools	Difference
1968	Untrained	.51	4	- .34	6	.87
1969	Trained	- .10	1	.75	1	- .65
	Untrained	- .29	6	.27	4	- .02
	Difference	.19		.48		
1970	Trained	1.67	1	1.07	3	.60
	Untrained	- .57	6	- .49	3	- .08
	Difference	2.24		1.56		
1972	Trained	.96	2	.56	5	.40
	Untrained	- .44	5	- .83	3	.39
	Difference	1.40		1.39		

The differences between the means of trained and untrained schools ranged from .19 to 2.24. Further, the differences between trained and untrained schools were relatively large when compared to the spread of scores in the district. The differences in the last two years ranged from about one-and-a-quarter standard deviations. These are important differences.

We found similar results when we looked at the means on test J on use of colleagues in subsystem decision making. These results are displayed in Table 8-4. Here again, trained schools generally scored higher than untrained schools, and differences were greater in the last two years. The differences between trained and untrained schools were not generally as great on test J as they were on test I, however, and in one instance (cluster Hg in 1969), untrained schools did better on test J than trained schools.

Another similarity appears between Tables 8-3 and 8-4. In both tables in 1969, the means of both trained and untrained schools were negative in cluster Gh and positive in cluster Hg. Then, in both tables in the two later years, the trained schools always showed positive means and the untrained showed negative means, in both clusters. Furthermore, in the last two years in both tables, the means of trained schools were higher in cluster Gh than in cluster Hg.

Certain of these similarities between Tables 8-3 and 8-4 echo the pattern we saw in Tables 5-12 and 5-13 of Chapter 5, where we examined tests C and F on responsiveness. In the tables in Chapter 5, we saw that trained schools in cluster Ab (and De) scored higher on tests C (and F) than those in Ba (and Ed) during the last two years. On test C (and F)

Table 8-4. Mean standard scores of groups of elementary schools in Kent on test J, grouped according to cluster Gh or Hg, year, and whether trained or untrained

		Cluster Gh		Cluster Hg		
		Mean on test J	No. of schools	Mean on test J	No. of schools	Difference
1968	Untrained	- .49	4	.33	6	- .86
1969	Trained	- .35	1	.28	1	- .63
	Untrained	- .64	6	.98	4	-1.62
	Difference	.29		- .70		
1970	Trained	1.32	1	.28	3	1.04
	Untrained	- .26	6	- .17	3	- .09
	Difference	1.58		.45		
1972	Trained	.58	2	.35	5	.23
	Untrained	- .41	5	- .29	3	- .12
	Difference	.99		.64		

the scores of trained schools in cluster Ba (and Ed) went into the negative, and the scores of trained schools in cluster Ab (and De) reached into the positive in 1969 as well as in later years. Another similarity is that on tests C and F, trained schools scored higher than untrained in all years within clusters Ab and De, just as was the case with tests I and J. Furthermore, the differences were stronger in 1970 and 1972 than in 1969, as we have also seen in the case of tests I and J. In clusters Ba and Ed, however, in contrast to cluster Hg, trained schools usually scored lower than untrained.

The chief differences between the sets of tables in Chapter 5 and those in this chapter seem to be three. First, trained schools had positive means in 1969 on tests C and F, but not in test I or J. Second, tests A and B (and D and E) distinguished a condition Ba (or Ed) in which training had adverse effects on responsiveness (tests C and F), but tests G and H did not distinguish nearly as strong a condition. In the last two years, trained schools in cluster Hg did less well on tests I and J than did those in cluster Gh, but the scores in cluster Hg did not go into the negative. Third, differences between trained and untrained schools on test C in cluster Ab continued to increase through 1972,* but these differences on tests I and J generally fell off after 1970.

Interaction between Tests and Training

We have interpreted Tables 8-3 and 8-4 to mean that training had salutary effects on decision making in schools of the sorts indicated by test I or J. It is not clear from the tables, however, whether these effects might be confounded by the level of the school's scores on tests G and H--the test by which we clustered the schools. It might even be the case that tests G and H were strongly correlated with tests I and J, and that the trained schools were usually the ones scoring high on tests G and H.* If that were the case, our belief that the training had causal effects would be seriously weakened. It might also be the case that neither test G nor H had any significant effect on the way schools reacted to training on test I and J--the differences between clusters Gh and Hg after 1969 might have been due more to chance variation than to levels of tests G and H. To answer these questions, we shall present two more tables.

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* We had no data on test F in 1972.

We constructed Table 8-5 by dividing school scores on test H into ranges--above 1.00, from zero to 1.00, and so on. Within each band, we divided trained from untrained schools. For each of the resulting subgroups, we then calculated the means on tests G, I, and J. This technique enables us to compare trained and untrained schools which have similar scores on test H. By doing this we remove most of the effect of test H; when we then compare the differences between trained and untrained schools on the other three tests we are more confident that the difference is due to training and not due to the school's score on test H. The table will also enable us to examine some other sorts of relations.

Unfortunately, we were unable to construct separate sub-tables

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* The similar question did not arise in Chapter 5 because, as Tables 5-12 and 13 showed, many clusters of trained schools had negative means on the outcome tests, and the clustering tests could not have been significantly correlated with the outcome tests.

Table 8-5. Means of standard scores of Kent elementary schools on tests H, G, I, and J pooled over the years 1969, 1970, and 1972 and grouped by level of the school's score on test H and by whether the school had received training

Level of test H	Test H mean	Training condition	No. of schs*	Test G mean	Test I mean	Test J mean
Greater than 1.00	1.58	Trained	6	1.17	1.40	1.02
	1.94	Untrained	2	- .63	1.65	1.80
Greater than 0.00 but less than 1.00	.58	Trained	4	- .27	.27	- .08
	.19	Untrained	5	.46	- .61	.15
Greater than -1.00 but less than 0.00	- .66	Trained	2	1.54	.02	.26
	- .59	Untrained	16	- .56	- .48	- .41
Less than -1.00	-1.14	Trained	1	-1.22	.72	-1.28
	-1.18	Untrained	4	.04	- .70	- .71
Totals	.72	Trained	13	.60	.79	.39
	- .35	Untrained	27	- .29	- .38	- .19

* Totals of schools exceed the actual number because most schools appear in these figures more than once during the three years.

by year, because there were not enough schools in any single year for us to use this technique of dividing schools by level on test H. We built Table 8-5, therefore, by treating schools in different years as separate instances or units of analysis. That is, if we had data from a school in each of the three years, the school appears three times in the means shown in Table 8-5. An extended table identifying the individual schools by year and the scores used in constructing Table 8-5 is presented in Appendix 8-C. Now let us examine Table 8-5.

Were tests G and H correlated? Was accuracy about communication channels (test G) correlated in a simple way with calling upon a larger number of colleagues for consultation when choosing teaching methods (test H)? No, it was not. As we read down Table 8-5 in the columns for tests H and G, reading either the means for trained or untrained schools, we see that the means on test G do not descend along with the means on test H. Here are the figures from Table 8-5 to which we refer:

Trained schools		Untrained schools	
Test H mean	Test G mean	Test H mean	Test G mean
1.58	1.17	1.94	- .63
.58	- .27	.19	.46
- .66	1.54	- .59	- .56
-1.14	-1.22	-1.18	.04

In other words, if tests G and H have any value in predicting the performance of schools on the decision-making tests I and J, they will not predict in the same way. They will be to some extent independent indicators.

Did test H predict performance on test I or J? Reading down the columns for tests I and J in Table 8-5, we see that test H was moderately correlated with the two decision-making tests. Both within the trained and untrained subgroups of schools, the largest positive values of I and J appear along with the highest level of H, and, in general, the largest negative values of I and J appear toward the bottom of the table. It seems that in schools where the mean number of others with whom teachers consulted about teaching methods (test H) was larger, there was more often also a collaborative mode of action that brought teachers into school-level decisions about curriculum or student conduct (test I) and that enabled a larger percentage of teachers to call upon others at the subsystem level to support their ideas or to consult with them about teaching methods* (test J).

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* Test H was somewhat, though not wholly, confounded with test J, despite the fact that different parts of item 45 went into the two tests, because the two parts of item 45 were not experimentally independent. However, the confounding did not do away with the separate usefulness of the two tests, as is attested by the fact that the profile of means of test J, reading down the table, has important departures from the profile of means of test H.

An important feature of the pattern of correlation between test H and the two decision-making tests (I and J) is that the correlation was much stronger among untrained schools than among trained. In fact, the rank order of means on test J and H for untrained schools is exactly the same. This difference in correlation between the trained and untrained schools is one more kind of evidence that the training was able to alter the usual pattern of behavior in the school.

In brief, Table 8-5 gives evidence that test H on communication with interdependent others did predict higher levels of performance on test I concerning the inclusion of teachers in school-level decision making and on test J concerning use of colleagues in decision making at the subsystem level, regardless of training, but the effects were not of practical magnitude until test H reached beyond one standard deviation from the district's mean.

Did training make a difference in test G? Yes, it did. We saw in Tables 8-1 and 8-2 that training did make a difference in test G on the average, and the difference is to be seen again in the totals at the bottom of the column for test G in Table 8-5. The difference is harder to discern in the separate bands of Table 8-5 because of the great differences in the numbers of schools in the several subgroups. The bands in Table 8-5 do show, however, that the differences between trained and untrained schools on test G were not uniform over different levels of test H.

Did training make a difference in test I or J? Among schools that scored higher than one standard deviation above the district mean on test H (top band), the evidence in Table 8-5 is that training failed to help the school on either test I or J. At that high level of test H (concerning communication with a larger number of interdependent others the training was apparently ineffective in improving the ability of schools in collaborative decision making either at the school level (test I) or at the subsystem level (test J). When teachers named a notably larger number of colleagues whom they consulted directly about their teaching methods, (test H) they also reported collaborations of the more far-reaching sort at the school level indicated by test J with its focus on school policy and at the subsystem level indicated by test J with its references to "individuals in your school," "others whose job includes making recommendations," and "a group or committee." And training seemed unable to push these high levels on tests I and J any higher. In fact, we see in the top band of Table 8-5 that the trained schools actually fell short of the untrained schools on tests I and J. Furthermore, the association between the high level of test H, on the one side, and the high levels of tests I and J, on the other, occurred despite the fact that the untrained schools at that level fell well below the average in accuracy about communication channels (-.63 on test G).

At lower levels of test H, training seemed to be of considerable help with school-level decision making (test I), but not with subsystem-level decision making (test J). In the second, third, and fourth bands of Table 8-5, we see that the means for trained schools were positive in every instance and that means for untrained schools were negative in every instance. Furthermore, the difference between trained and untrained schools on test I was greatest where the level of test H was lowest. Apparently, training could have effects on school-wide collaboration (test I) even though it left the more intimate kind of collaboration (test H) very low. But if the more intimate kind of collaboration (test H) was very high (whether because of training or any other reason), then school-wide collaboration was very high also, and training added nothing to it. Test J on subsystem collaboration showed no regular effects of training at the several levels of test H.

We see in the totals at the bottom of Table 8-5 that the trained schools, overall, scored higher than the untrained on all four tests, with the largest effect occurring on test I and the smallest on test J. The differences between trained and untrained schools seem to us to be of practical magnitude on all tests except possibly J. We can conclude that overall, training had beneficial effects in these schools on second-level skills. The foregoing discussion shows, however, that the effects were not uniform. Indeed, one trained school in one year (the instance shown in the bottom band of Table 8-5) showed strongly negative scores on three of the four tests.

Tables 8-3 and 8-4 reflect a bit of the pattern we have seen in Table 8-5. The earlier tables showed less effects from training on test J than on test I. We have seen this in Table 8-5 also. In addition, the earlier tables gave us information about differences between years; they showed us that the effects of training were clear in every year, even though Table 8-5 shows us that the effects were not uniform among schools scoring differently on test H. We constructed Table 8-5 in an effort to find out if the effects of training displayed in Tables 8-3 and 8-4, were confounded by the school's score on test H. We examined Table 8-5 by asking several related questions. In brief, the answers were as follows: (1) tests G and H are not correlated--they are independent indicators; (2) test H did predict performance on tests I and J to some extent, regardless of training, but its ability to do so was largely limited to those schools that scored well above the district mean on test H; (3) training made a difference on test G; (4) training made a difference on test H; and (5) overall, training made a difference on tests I and J, but the effect was neither uniform nor simple.

We now turn to Table 8-6, which re-groups the information about

Table 8-6. Means of standard scores of Kent elementary schools on tests G, H, I, and J pooled over the years 1969, 1970, and 1972 and grouped by level of the school's score on test G and by whether the school had received training

Level of test G	Test G mean	Training condition	No. of schs*	Test H mean	Test I mean	Test J mean
Greater than 1.00	1.68	Trained	6	1.15	1.32	1.97
	1.43	Untrained	1	.20	-.38	-.03
Greater than .50 but less than 1.00	.53	Trained	1	-.52	.14	.88
	.76	Untrained	4	-.64	-.17	-.13
Greater than 0.00 but less than .50	.20	Trained	1	.99	-.56	-.17
	.21	Untrained	4	-.16	-.59	-.15
Greater than -.50 but less than 0.00	-.25	Trained	2	.48	1.13	.03
	-.30	Untrained	5	-.29	-.17	-.10
Greater than -1.00 but less than -.50	-.66	Trained	2	1.07	-.12	-.16
	-.61	Untrained	6	-.25	-.16	-.16
Less than -1.00	-1.22	Trained	1	-1.14	.72	-1.28
	-1.32	Untrained	6	-.52	-.75	-.36
Totals	.60	Trained	13	.72	.79	.85
	-.30	Untrained	26	-.35	-.37	-.18

* Totals of schools exceed the actual number because most schools appear in these figures more than once during the three years.

the four tests. Perhaps, by adding the information from Table 8-6 to the information we have already discussed, we can find a simpler overall interpretation of the results than we have achieved so far. We built Table 8-6 in the same way we built Table 8-5, except that we divided the schools by their ranges on test G instead of test H.

Did test G predict performance on test I or J? Extracting the relevant figures from Table 8-6, we have the following:

Trained schools			Untrained schools		
Test G mean	Test I mean	Test J mean	Test G mean	Test I mean	Test J mean
1.68	1.32	1.97	1.43	-.38	-.03
.53	.14	.88	.76	-.17	-.13
.20	-.56	-.17	.21	-.59	-.15
-.25	1.13	.03	-.30	-.17	-.10
-.66	-.12	-.16	-.61	-.16	-.16
-1.22	.72	-1.28	-1.32	-.75	-.36

Among trained schools, tests G and J were rather strongly correlated. Among untrained schools, tests G and J were slightly correlated. Tests G and I were essentially uncorrelated in both groups. Accuracy about communication channels (test G) seemed to help trained schools a great deal, and untrained schools slightly, to collaborate in decision making at the subsystem level (test J), but it did not help teachers to contribute to school-level decision making (test I). This is hardly surprising. Test J indicates the extent to which teachers sought out others for consultation, and an accurate map of communication channels would help them, especially if training helped them develop skill in using those channels.

Tests G and J may, in fact, have been testing very similar kinds of behavior. We assume that test J reflected respondents' communication about work-related matters. Therefore, it seems likely that those who scored high on test G would be especially alert to communication links through which work was done. Similarly, test J also asked about communication links concerning choice of teaching method, and faculty support for new ideas.

Furthermore, both tests G and J (in contrast to test I) reflected the viewpoint of the individual respondent in charting communication links. They asked what communication links "you" used; they did not ask about communication structure in the school at large. In brief, test G may have indicated sensitivity to exactly the kind of proximate work-connected links elicited by test J, rather than any special knowledge of the way other teachers in the school were being consulted on wider policy matters (test I).

Evidence from yet another study fits neatly with our findings here. Schmuck, Murray, Smith, Schwartz, and Runkel (1975) studied the efforts of six schools to adopt multiunit structure. They examined evidences of factors that helped and hinered faculties in their efforts to establish the intimate communication among teachers required if the units (teams) of teachers were going to function properly. In discussing conditions of readiness for making the move toward multiunit structure, they say:

> Our observations in this project have led us to conclude that some small amount of cooperative interdependence--

> whether it is formal or informal -- is one important prerequisite for further structural change. We also believe that when teachers feel frustrated over being psychologically separated, . . . commencing movement toward a multiunit structure will be easier. More relevant, however, appears to be the presence of newly forming functional clusters of teachers who are communicating about their teaching (p. 355).

Probably the sensitivity to the "newly forming clusters" as reflected on test G enabled people in high-scoring schools to make better use of work-connected links of the sort indicated by test J.

If our interpretation is correct, we should expect to see some evidence that schools scoring high on these tests were more effective than schools scoring lower in carrying out collaborative work, and especially in making collaborative organizational changes. Further, we should expect the more successful schools to appear among the trained schools, since the correlation between test G and test J was higher among trained schools than among untrained, and since the highest scores on tests G and J occurred among the trained schools.

In fact, evidence from other chapters in this book supports the expectations we just stated. Table 8-7 shows the standard scores on tests G and J of four selected schools. The two schools listed in the upper part of the table are schools that satisfied our most stringent criterion for successfully establishing collaborative structure (to be presented in Chapter 10). Further, these two schools are the schools that received the most training in organizational development. And school K12, as we shall see in Chapter 10, was the school that achieved the most distinctive pattern of innovation. The two schools listed in the lower part of the table did not establish new collaborative structure and received no training. Over the years among the trained, successful schools, high

Table 8-7. Standard scores of selected Kent elementary schools on tests G and J over three years

School	Test	1969	1970	1972
Trained schools that successfully established collaborative structure:				
K12	G	-.77*	1.59 (1/13)**	1.33 (2/15)
	J	1.53 (2/12)*	2.25 (1/13)	1.58 (1/15)
K11	G	2.54 (1/12)	1.37 (3/13)	2.23 (1/15)
	J	-.35	1.32 (2/12)	.28
Untrained schools that did not establish collaborative structure:				
K09	G	-1.44	-.64	-.51
	J	-.31	-.07	-1.55
K01	G	-.09	-1.54	-1.05
	J	-.39	-1.51	-1.51

* Before training

** Numbers in parentheses tell the rank of the school in the indicated year among the number of elementary schools existing in that year. For example, school K12 ranked second on test J among 12 schools in 1969.

scores on tests G and J predominated. Correspondingly, low scores predominiated among untrained, non-collaborative schools. This result matches our expectations. Furthermore, it reinforces our finding in Chapter 6 that larger amounts of training were especially effective in enhancing the use of communicative skills.

Returning now to our discussion of Table 8-6, we note a contrast between the effects of high scores on tests G and H. Unlike high levels of test H (see Table 8-5), high levels of test G did not enable untrained schools to score high on tests I and J. This is not surprising. Tests H, I, and J all indicate ability to consult and collaborate with others in the school, and a high level of collaborative skill in a school would very likely be detected by all three tests. Test G, in contrast, indicates knowledge or understanding, and that is not in itself sufficient to move people into collaborative action. It was only when high scores on G occurred in trained schools that the organizational successes occurred that we described above. This result, too, matches our theory.

Did training make a difference in test H? Yes, it did. The mean of trained schools exceeds the mean of untrained schools on test H in every band on Table 8-6. The overall difference shown in the totals at the bottom of the table is large. Whatever the level of accuracy about communication channels, training seemed to increase the number of teachers who considered themselves interdependent with others in choosing their teaching methods.

Did training make a difference in test I or J? Yes, it did. The mean of trained schools exceeds the mean of untrained schools on test I in every band on Table 8-6. The trend is similar for test J, though the effect is not as uniform; there are small exceptions to the trend in the third and fifth bands of the table. The differences between trained and untrained schools were especially large when test G was greater than .50. This seems reasonable, because training would be more effective in moving people into actual joint decision making at subsystem and school levels when the people had a good map of communication channels through which they could reach the right collaborators.*

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*The questionnaires contained other items concerning appropriate decision making similar to those we used for tests I and J. We did not make tests out of them because, in most cases, they were not included in four or even three years, or, in a few cases, because they did not show a wide enough range of response to be discriminating. On most of these additional items, the means of trained schools exceeded those of untrained schools, and school K12 usually fell near the top of the distribution. Appendix 8-D shows the distributions of responses to the additional items. Item 67 was the same as item 45 of test H except that it asked about consultation on subject matter instead of teaching methods. Items 68 and 69 were the same as items 65 and 66 of test J except that they asked about subject matter instead of teaching methods. Items 81, 82, 83, and 84 were the same as item 56 of test I except that the "favorable" response was "citizens' or parents' committee" or "a student committee" instead of "a group of teachers," and items 83 and 84 asked who the respondent would _prefer_ to make policy instead of asking who actually made policy. Items 59, 85, 86, 87, and 88 differed from item 63 of test I in the same ways that items 81 through 84 differed from item 56. Appendix 8-D also contains two items (73 and 74) concerning the manner in which the principal went about making decisions.

Harmful effects of training. In Chapter 5, we found that training produced favorable results under certain conditions and unfavorable results under other conditions. Particularly, we identified a group of schools in cluster 3a (whose scores were negative on communication) in which training produced negative scores on responsiveness -- scores that were even more negative than those of untrained schools. Upon examining Tables 8-3, 8-4, 8-5, and 8-6, we found no group or band of trained schools that displayed lower scores on tests I and J than untrained schools. The only band where trained schools showed a deficit in comparison to untrained schools appeared in the bottom band (those scoring below -1.00 on either test G or H). There, one trained school (K13 in 1970) scored markedly lower on test J than the mean of untrained schools. Considering the possibility of chance fluctuation influencing the placement of this school on test J, and that this same school scored markedly higher than the untrained schools on test I, it seems fair to say that we do not have persuasive evidence of any deleterious effects of training on the second-level skills of the Kent elementary schools.

Conclusions. We constructed Tables 8-5 and 8-6 in an effort to find out if the effects of training were related to school's scores on either test H or G. Upon examining the tables the following conclusions seem warranted. First, training apparently increased school scores, on the average, on all four tests. Second, the effect of training on decision making (tests I and J) was increased when accuracy about communication channels (test G) was high (see Tables 8-3, 8-4, and 8-6). In fact, test G was a useful indicator of a school's ability to profit from training.* Third, the effect of training on decision making (tests I and J)

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*However, if one is to use test G as an indicator, one will usually need to know more than how to interpret the school's standard score on the test. At times, in fact usually, the kind of district-wide information needed to compute standard scores is not available to the OD consultant. In an effort to provide more useful information we compared the standard score of the schools in Table 8-6 with the raw scores they obtained on test G. This comparison indicated that a school's decision making will profit from OD training -- the school will score well on test I and J -- if on the average each staff member is able to correctly identify at least one communication link beyond those at which he or she is the terminus. However, if the

> staff does not have this minimum level of awareness, the efforts put forth in training may not have fruitful results. Of course, the crucial level of test G in other districts may differ somewhat from the level we found in Kent.

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was erased when communication with interdependent others (test H) was above 1.0 standard deviation (see Table 8-3, 8-4, and 8-5).* Even at that high level of test H, however, training brought about a large difference in accuracy concerning communication channels (test G; see Table 8-5, top band).

The appropriate advice to consultants seems straightforward: (1) Training in any kind of active collaboration and decision making will have considerable spill-over into other kinds. When you are teaching collaborative skills for one purpose, strike while the iron is hot by showing participants how those same skills can be adapted to other purposes involving other subsystems in school or district. For example, show teachers how these skills might be used not only with other teachers but with students and members of other subsystems. This interpretation, by the way, fits hand in glove with the conclusions we reach in Chapter 10 about the effects of experience with collaborative innovations. (2) If you want participants to use their collaborative skills to best advantage, help them to discover the functioning communication channels so that they can find their necessary collaborators. This seems only common sense. Table 8-6 however, shows how great this effect can be, and it shows how greatly schools can differ in the accuracy of their staffs about their communication channels.

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*This is probably because tests H, I, and J measured similar things and consequently they were highly correlated.

Necessity of First-Level Skills

In Chapter 3, we postulated three levels of organizational skill: interpersonal, subsystem, and organization-as-a-whole. We argued that skills at each level incorporate the skills at the lower level. In this way, the success of the second-level activities depend to some extent upon the successful acquisition of first-level skills. One way to test our staircase hypothesis would be to hunt for schools in which first-level skills were presumably too low to support second-level skills, but in which second-level skills were nevertheless high. If we found no such schools among a reasonably long list, our hypothesis would be supported. Diagrammatically, our hypothesis predicts that schools will be found in the conditions indicated by the "X"s in the table below, and will not be found in the empty cell.

		Second-level skill	
		Low	High
First-level skill	High	X	X
	Low	X	

As theory and technology now stand, the hypothesis in this form is next to impossible to test. It states that a school can be high on second-level skills only if it has "passed" some necessary degree of the first-level skills. But how high a score on a first-level test of interpersonal skill is "passing"? We do not now know. It will be a great contribution to the art of organizational development when someone produces a fairly reliable and practical indicator that can be used to tell whether first-level skills in a school are sufficiently strong to give continuing support to second-level skills.

In the meantime, we can carry out a small and preliminary exploration of our data with this form of the hypothesis in mind. We can hope that the two Kent elementary schools that scored highest on the second-level tests might be above "passing" on one or more of the first-level tests. Similarly, we can hope that the two schools that scored lowest on second-level tests might be below "passing" on one or more of the first level tests. At least, we can hope that the highest two and lowest two schools can help us to illustrate the pattern we would predict if we only knew the "passing" scores on the first-level tests. Table 8-8 shows the scores of the four schools on the first-level tests A and C and the second-level tests G and J in the last three years.

The two schools whose scores appear first in Table 8-13, schools K12 and K11, illustrate schools that we would predict to fall in the upper-right cell of the diagram -- the "high-high" cell. These two schools had more OD training than any others and, by the criterion

Table 8-8. Standard scores of selected Kent elementary schools on tests A, C, G, and J over three years

School	Skill level	Test	1969	1970	1972
Trained schools that successfully established collaborative structure:					
K12	First	A	2.30*	2.33	1.91
		C	1.91*	2.80	2.57
	Second	G	.77*	1.59	1.33
		J	1.53*	2.25	1.58
K11	First	A	1.00	1.04	.67
		C	.79	.34	-.27
	Second	G	2.54	1.37	.27
		J	-.35	1.32	.28
Untrained schools that did not establish collaborative structure:					
K09	First	A	.21	.65	-.48
		C	.41	.64	-.56
	Second	G	-1.44	-.64	-.51
		J	.31	-.07	-1.55
K01	First	A	-1.70	-.19	-.48
		C	.19	-1.54	-.97
	Second	G	-.09	-1.54	-1.05
		J	-.39	-1.51	-1.51

*Before training

we shall explain in Chapter 10, successfully established collaborative structure among teachers. Between them, they showed the "high-high" pattern; that is, when G and J were high, so were A and C. It is noteworthy, too, that when K11 left the "high-high" pattern in 1972, it nevertheless did so in a way that fit our prediction. That is, when the score of school K11 on test C dropped off severely in 1972, so did its score on test J. This is the pattern in the lower left of our diagram -- the "low-low" cell.

We guess that "passing" scores on tests A and C would lie below the values Table 8-13 shows for school K09 in 1969 and 1970. If so, we would classify school K09 in the upper left cell of the diagram -- "high-low" as a school that did well enough on the first-level tests in 1969 and 70, but failed to achieve comparable elevations on the second-level tests in those years. Again, when scores on A and C dropped in 1972 so did the score on test J, even though J had already been negative in 1970. Of course, we cannot know whether school K09 should be classified as passing on tests A and C, because we do not know the passing scores.

School K01 surely exemplifies schools that scored too low on first-level skills to have a good basis for developing second-level skills. The scores of school K01 were generally low on the tests of both levels, -- in the "low-low" cell -- and especially so in the later two years.

Although our conclusions about high and low scores on these skills are only tentative, we can reasonably expect that the four schools we have examined would fit into our diagram as predicted. Figure 8-2 diagrams the schools.

Figure 8-2

1969

	Low	High
High	K09	K11 K12
Low	K01	

1970

	Low	High
High	K09	K12 K11
Low	K01	

1972

	Low	High
High		K12
Low	K11 K09 K01	

We do not think it worthwhile to examine our other schools in this way, because we do not have any way of ascertaining the passing scores. We hope that before long we or others can marshal adequate data to estimate passing levels.

Work-Orientation of Communication Channels

In addition to the items we used in tests, G, H, I, and J, our questionnaires included some other items that were indicators of second-level skills. Most of these additional items, however, were used in too few years to be included in the multidimensional analyses, and others did not seem to fit together with the items of any of the four tests. We present here the results on item 48,[*] which seems to us to give additional information about the nature of communication at the subsystem level in the trained schools. The item consisted of the following sections:

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[*] Item 48 was adopted from the items used by Abbott, Pellegrin, and Eidell in their Program on Innovations at CASEA at the University of Oregon.

Section A. Please think of people with whom you talk seriously about things important to you, inside or outside formal meetings, once a week or more on the average. Write their names below.

Section B. Who are the persons, if any, whose jobs are so closely related to yours that you believe the two jobs must be performed collaboratively if either of you is to perform this work effectively? Please write their names.

The item was built by comparing the persons named in answer to section A, with the persons named in answer to section B. The individual's score on item 48 consisted of the number of matches (same person named in both section A and section B) that occurred between the sections of the item. The school's score was the mean of the individuals' scores.

The scores reported told us about the communication between persons whose jobs were highly interdependent with the respondent. Within this group of persons, the scores indicate the average number of persons with whom staff members had "serious" communication about "important matters." We expected, of course, that this score would be higher in schools that were successful in establishing collaborative structure because the structure would require more task-oriented discussion among teachers. We also expected the scores to be higher among OD trained schools because of the emphasis of the training on communicative skills and upon solving problems with the people involved in the problem. The data were available only in 1972. Appendix 8-D gives scores for all Kent elementary schools and for means of the three districts. Here, in Table 8-9, we present scores only for those schools we selected for special attention in earlier sections of this chapter. The scores in Table 8-9 are raw scores, not standard scores.

Table 8-9. Raw scores of selected Kent elementary schools on item 48 in 1972

School or mean	Raw score
Highest school (K15)	1.35
K11 and K12	1.32
K14	.95
Mean of trained schools	.89
K01	.48
Mean of untrained schools	.35
K05 and K09	.24
Lowest school (K08)	.11

The range of scores was great. As expected, the trained schools scored higher than the untrained -- very much higher, in fact. School K15 had received its training the summer before the questionnaire was administered. Schools K11 and K12 were the two schools that had received the most training. These three fell at the top of the distribution. Schools K05, 11, 12, 14, and 15 were the schools that passed Chapter 10's stringent criterion for successfully establishing collaborative structure. Of these, K11, 12, 14, and 15 fell at the top of the distribution, but school K05 fell just above the bottom. School K05 was the school that received the least amount of training.

Agreeing on Goals

Two items dealt with amount of agreement on school goals or with the amount of discussion about goals. The score on item 72 was built by comparing the answers of principals to item 72 with the answers given by staff when they were asked to guess how the principal had answered the item. Item 72 was constructed in the following manner. First, we asked the principal to respond to the following item:

What would you feel are *the four* primary objectives toward which effort should be put in your school *system* during the next two years? Put 1 by the one most important, 2 by the next most, 3 by the next most, and 4 for the 4th most important.

- ( ) Reducing the *dropout rate*.
- ( ) Improving attention to *basic skills in the first three grades*.
- ( ) Improving attention to *physical health* and *safety of students*.
- ( ) Increasing children's *motivation and desire to learn*.
- ( ) Improving learning opportunities for *disadvantaged children*.
- ( ) Increasing the percentage of *college attendance* by graduates.
- ( ) Improving *discipline* and the behavior of "difficult" children.
- ( ) Increasing the level of *academic achievement* in all grades.
- ( ) Improving children's adherence to *moral and ethical* standards.
- ( ) Improving learning opportunities for *gifted or talented children*.
- ( ) Other; specify ________________________________.

Second, we asked each teacher to *estimate* how the principal would have answered the above item. We then computed Spearman's rho (Siegel, 1956) between the principal's rank order and the rank order of each teacher in that school. We averaged these correlations and reported the mean correlation for each school.

Item 89 read as follows:

How often do you yourself discuss goals of this sort in INFORMAL occasions (coffee room, corridors, while picking up mail, in the parking lot, etc.)? Please make an "X" before the answer that comes closest to your case.

( )	Never	[0 Unfavorable]
( )	Once or twice a year, maybe.	[2]
( )	About once a month, maybe.	[12]
( )	More than once a month but not once a week.	[24]
( )	About once a week.	[52]
( )	More than once a week.	[104 Favorable]

The numerial values reported indicate the number of times the staff discussed the school's goals in informal settings during the year. A score of 68 indicates that the staff discussed the school's goals an average of 68 times during the year in informal settings. Answers to item 89 were weighted as shown in the brackets, the higher score being the more favorable.

Data from item 72 were available in four years; data from item 89 only in 1972. Table 8-10 shows the raw scores for item 72; Table 8-11 shows the raw scores for item 89. Again, only selected schools are shown. Scores for all schools appear in Appendix 8-D.

Table 8-10. Raw scores of selected Kent elementary schools on item 72 over four years

Highest, lowest, and means	1968	1969	1970	1972
Highest school	.54 (K02, 08)	.58 (K04)	.67 (K10)	.61 (K05)
		.56 (K09)	.61 (K09)	
			.55 (K11)	
Trained mean	none	.55 (and K11)	.44	.46
		.42 (K01, 07)	.43 (K12)	
Untrained mean	.37	.39	.41	.33 (and K04 and 12)
	.31 (K01)	.20 (K12)	.26 (K09)	
	.22 (K07, 09)			
Lowest school	.09 (K03)	.05 (K03)	.03 (K06)	.25 (K15)

Note: Because some principals somtimes did not answer this item, schools K02, 05, and 08 did not appear in 1969, nor K01, 02, 08 in 1970, nor K01, 02, 03, 07, 08, 11 in 1972.

Table 8-11. Raw scores of selected Kent elementary schools on item 89 in 1972

School or mean	Raw score
Highest school (K03)	76
K12	74
K01	69
Mean of untrained schools	68
Mean of trained schools	63
K11	58
K09	53
Lowest school (K05)	52

In Table 8-10, we see that trained schools did better at estimating their principals' goals than untrained in all years, and K11, when we had data for it, fell at or above the mean of trained schools. But we were surprised to find that K12 fell below the mean of other trained schools in both the years following its training; in 1972, it barely reached the mean of untrained schools. Also surprisingly, school K09, which had been low in so many distributions, fell near the top. Apparently, being able to tell how the principal ordered his or her goals was not as important to the functioning of these schools as we had thought.

A final point of interest in Table 8-10 is that although some schools came perilously close to zero accuracy in estimating the goals of their principals, no school in any year showed a negative score.

Table 8-11 shows the more usual placement of schools K12 and K09, but untrained schools reported more discussion of goals on informal occasions than trained, on the average, with school K01 scored higher than expected and K11 lower. Both these tables tell us that we do not understand very well the processes by which the schools went about agreeing upon goals, nor the implications for organizational functioning.

Problem Solving

Three items, all administered only in 1972, indicated the ability of schools to marshal appropriate work groups to deal with problems as they arose. The three items were:

Item 78: Sometimes it is easier to get a job done if a well-coordinated group works on it instead of a single individual or a series of individuals. Some people are especially skillful at getting such a work group together and getting them organized into an effective team. Are there some teachers on the staff who clearly have this special coordinating ability?

About how many are there?

Scores consisted of the average number of persons mentioned in response to item 78.

Item 79: Are there others who generally seem able to fit quickly and effectively into a work team as it is getting organized?

( ) Many. [Favorable]
( ) Some. [Favorable]
( )) Only one or two. [Unfavorable]
( ) None. [Unfavorable]
( ) I don't know. [Not tallied]

Scores consisted of the percentage of persons selecting either of the favorable responses ("Many" or "Some") to item 79.

Item 80: Are temporary work teams used very often for the temporary, special tasks that come up in your school?

( ) For many tasks every year. [Favorable]
( ) For some tasks every year. [Favorable]
( ) For only one or two tasks during a year. [Unfavorable]
( ) For none. [Unfavorable]
( ) I don't know. [Not tallied]

Scores consisted of the percentage of persons selecting either of the favorable responses ("For many tasks every year" or "For some tasks every year") to item 80.

Table 8-12. Raw scores of selected Kent elementary schools on items 78, 79, and 80 in 1972

Highest, lowest, and means	Item 78 (number of persons)	Item 79 (percent favorable)	Item 80 (percent favorable)
Highest school	4.3 (K12)	100 (K12)	76 (K10)
	4.1 (K09)	92 (K11)	68 (K12)
	3.7 (K11)		50 (K11)
Trained mean	2.9	86	37
Untrained mean	2.7	84	41
	1.9 (K01)	77 (K09)	29 (K09)
			14 (K01)
Lowest school	1.6 (K13)	67 (K01)	11 (K07)

On the average, trained schools did very little better than untrained in their knowledge of persons with organizational skill or their ability to gather skilled people quickly in response to problems; on item 80, in fact, untrained schools scored slightly better than trained. Nevertheless, there were great differences among schools on these three items, and our selected schools fell where we expected them to fall, with the exception of school K09 on item 78. Schools K11 and 12 fell well above the trained means on all three items, and K01 and 09 fell well below the untrained means on all three items with the exception of K09 on item 78. Apparently, this sort of ability connected with problem solving at the subsystem level was considerably aided by large enough amounts of the sort of training we and the cadre gave.

Summary

In this chapter we presented evidence on the effects of organizational training on the functioning subsystems of schools. We believe this chapter is particularly valuable because of the importance we place on the subsystem as the functional unit most critical to the success of any organizational change strategy. We compared the schools on four factors: (1) awareness of functioning communication channels (test G); (2) communication with interdependent others (test H); (3) including teachers in decision making (test I); and (4) use of colleagues in decision making (test J). We analyzed these four factors by using nonmetric multidimensional scaling techniques. Our major conclusions supported the contention that OD training of the sort we used in the Kent school district increased the school staff's awareness of communication links within the school, their communication with interdependent others, their use of teachers in school-wide decision making, and their use of colleagues in decision making at the subsystem level.

More important, we found a relationship between the staff's awareness of communication channels and their ability to profit from OD training. When schools characterized by high levels of awareness of communication channels received training, they were able to profit from the training by increasing the use of teachers in school-wide decision making and implementing collaborative decision making at the subsystem level. However, if schools did not show a high level of awareness of communication channels their success in employing these decision making methods was diminished whether the school had received training or not.

The implications of these findings for consultants seem obvious. As we have discovered so often in earlier chapters of this book, the success of OD training is heavily influenced by the characteristics of the client organization. In this instance, one must either select those schools that have appropriate readiness characteristics, particularly, high levels of awareness of functioning communication channels in the school, or one must incorporate strategies in the early stages of the intervention that are designed to enhance the readiness characteristics.

We concluded this chapter by presenting evidence for the effectiveness of training in improving other subsystem skills, particularly the nature of communication channels, problem-solving procedures, and general agreement about school goals. The next chapter adds to our understanding of school subsystem functioning and examines the sharing of influence among the staff and principal.

Chapter 9

IS INFLUENCE IN SCHOOLS A ZERO-SUM GAME?

by Lindbloom and Runkel

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Chapter 9

IS INFLUENCE IN SCHOOLS A ZERO-SUM GAME?

Lindbloom and Runkel
(final)

Training a school faculty in organizational skills is likely to bring about a redistribution of power within the school. When members of the staff have the skills to communicate more effectively to solve problems and to make decisions together, they are almost certain to participate more actively in making decisions about how their school is run. In fact, involving more people at all levels of decision making is often an explicit goal of OD training. Under these conditions, the principal stands to lose power and the teachers stand to gain -- or so it appears. This knotty issue must be confronted sooner or later by every administrator and staff involved in organizational development training. The issue vitally affects the school staff; it confronts organizational training consultants, and it is an empirical and theoretical problem for students of organizational behavior. Can a principal share decisions formerly his or hers alone and not give up some of his or her control over the school? Is it possible for an administrator to let teachers participate in decisions about school affairs and still retain the same amount of influence or power? In short, can a principal share power without losing it?

The Problem

The traditional view of power* in organizations assumes

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* For the purposes of this discussion, we make no distinction among power, influence, and control.

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that control is unilateral and that decisions made by a superior are carried out by subordinates; that is, power flows from the top of the organizational pyramid down the lines of authority to functionaries below. In this assumed pattern of command and obedience, any delegation of decision-making authority means that the leader's powers are being surrendered to a subordinate. Allowing subordinates to make decisions means "giving up" prerogatives and thus giving away power. A subordinate's gain is the leader's loss. In contemporary terminology, this is a "zero-sum game," because the total amount of power among the people in an organization is assumed to be "fixed" so that one person can gain power only if another loses some. Under this hypothesis, it is impossible for one person's power to go up without another's going down, and it is impossible for the total amount of power in an organization to increase or decrease.

In contrast with this long-standing assumption about win-lose power relations is a newer perspective emphasizing flexibility in the distribution and exercise of power. In the new view, the total amount of power in an organization can increase or decrease as the nature and amount of interaction in the organization changes. Arnold Tannenbaum (1968) has proposed the view that the total amount of power existing within an organization depends on the extent to which members influence one another's behavior. Like Tannenbaum, when we speak of power, we mean power to get tasks done effectively. When more people become influential in shaping a task, the total amount of power in the organization increases. In this problem-solving view of the exercise of power, the power of the principal to get things done is increased when teachers become more influential because the teachers are helping to get things done more effectively.

For any influence to be exercised, some type of interaction must take place. Therefore more interaction is a necessary, but not sufficient, condition for more influence to be exercised. Changes in the amount of interaction between members of an organization may produce changes in the amount of influence they have on one another and thus increase the total amount of power available in that organization.

The newer perspective of Tannenbaum and others focusses attention on patterns of interaction and reciprocal influence among administrators, teachers, and students. It suggests that if people in schools work together more and, as a result, influence each other more, the total amount of power available among them will increase. If the staff participates in making decisions which were formerly made unilaterally by the principal, the principal's influence with the teachers need not be reduced. In fact, it too may increase! In this view, the power relations between the principal and the teachers are not the win-lose sort required by traditional assumptions, but are a sort that allows the total power to vary as teachers and principal vary the extent of their collaboration in work and decision making. The teachers can gain influence without the principal losing any.

The central purpose of this study was to make an empirical test of Tannenbaum's hypothesis that the total amount of influence in an organization can vary. To do this, we asked two questions. Can an increase in the total amount of influence in a school occur? And, are schools that have undergone an intervention for organizational development more likely to show an increase in total influence than schools that did not undergo such an intervention?

Concerning a related area of inquiry, we also asked: among staff with high levels of shared influence, will a large percentage of teachers indicate expertness and likableness as bases of principals' power?

Method

To answer the first two questions, we made use of certain items* in the questionnaires administered to teachers-and-others** and to building administrators in twenty elementary schools in Kent and Auburn. These schools were chosen because they all had data on the relevant test items in both 1969 and 1970. The following four questionnaire items provided the data on perceived influence in the school.

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* In Chapter 7 we saw that Saturen used items 54 and 55 to indicate the influence teachers perceived they had on how the school was run.

** This phrase includes teachers, teaching aides, assistant teachers, department heads (if any), counselors, librarians, and nurses. The great bulk of the respondents, of course, were teachers.

Item 70. In general, how much influence do you feel the principal has on how your school is run?

( ) No influence
( ) Little influence
( ) Some influence
( ) Considerable influence
( ) Great deal of influence
( ) I have no opinion

Item 54. In general, how much influence do you feel the teachers as a group have on how your school is run?

(Same choices as above)

Item 71. In general, how much influence does the principal of your school have with the teachers in your school when it comes to activities and decisions that affect the performance of their classroom activities?

(Same choices as above)

Item 55. In general, how much influence do the teachers in your school have on the principal when it comes to his activities and decisions that affect the performance of your school?

(Same choices as above)

The answers were given weights from 1 (no influence) to 5 (a great deal of influence). Answers of "I have no opinion" were eliminated from computations. In each school, each weight was multiplied by the percentage of teachers who gave the corresponding rating to the item being tabulated. The weighted percentages derived for each rating of an item were then added to yield a single score. This score was the composite rating by teachers in the building of the amount of perceived influence they or their principal exerted in the area described by the item. For instance, if 40 percent of the teachers in a building marked a "3," and 60 percent marked a "4," the sum of the products (3 x 40 = 120, 4 x 60 = 240) would be 360, the composite score for teachers in that building on that item. Responses from principals were given the same 1-to-5 weights; but in the case of principals, no multiplier-percentage was necessary.

Answers given by the principal and by the teachers on each item in 1970 were compared to the answers they gave in 1969* to see if they showed a trend upward (indicating greater perceived influence), remained the same (indicating a maintenance of perceived influence), or went down (indicating a decline in perceived influence). For each of the four items, both the trend in the principals' responses and the trend in the teachers' responses were ascertained.

To determine whether the total amount of perceived influence in a school increased, decreased, or remained the same, the direction of change for the principal and the teachers in the same building on complementary items was compared. The first two items displayed above are complementary, since they deal with the influence of the two parties, principal and teachers, over the way the school is run. The third and fourth items are also complementary, since they deal with the influence of the principal on the teachers and of the teachers on the principal regarding the performance of their respective duties. Thus, on complementary items, if the perceived influence of both the principal and the teachers was greater in 1970 than in 1969, or if one increased and the other remained the same, we concluded that an increase in the total amount of perceived influence had occurred. Any other combination (that is, one going up and the other down, one remaining the same and the other going down, or both going down) indicates no increase in total influence.*

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* Data were used from these years because these are the years that the four questionnaire items were administered to both trained and untrained schools.

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* While we are interested in this paper primarily in cases of increased total influence, we should note that Tannenbaum's theory suggests that the sum of organizational influence can vary in both directions. Thus, combinations of teachers' and principal's responses that show a decrease in total influence also lend support to his basic hypothesis. In the analysis reported here, however, we were primarily concerned with cases of increase.

Since both the principal's and the teachers' scores can go up, down, or remain the same, nine combinations of responses are logically possible in each school on each pair of complementary subitems. However, the weighted percentages of teachers choosing the several answers never summed exactly to the same number in 1970 as in 1969; that is, scores always went either up or down. Because there seemed to be no special advantage in designating an arbitrary middle range as "no change," we merely omitted that category for teachers. In every school, the score for teachers is always classified as increasing or decreasing, never as remaining the same.

Table 10-1 shows the six possible categories into which changes in a school, using our scoring method, can fall. If the traditional zero-sum hypothesis is correct, it is impossible for any schools to fall in any other cells than those labelled with the question marks.

Table 10-1. Possible combinations of changes in influence on the part of teachers and principals

		Changes in teachers' views of their influence	
		Up	Down
Changes in principals' views of their influence	Up		?
	Same		
	Down	?	

If, on the other hand, our hypothesis is correct, at least *one* school will fall in the "up" or "same" cell in the "up" column.

Results for Primary Hypotheses

The first part of our analysis, comparing responses of principals and teachers, will show the results in only 16 of 20 schools, because in four of the schools the principal did not give us usable responses to the four items. All 20 schools will be used later when we examine only the responses of teachers.

Table 10-2 shows the distribution of schools obtained by classifying the responses of the principals and teachers in sixteen elementary schools returning responses to all four subitems in both years.* The principal's view of his or her own influence over the way

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* Among the twenty elementary schools contributing data to this study, the percentages of respondents from among the teachers staffing each school ranged (for the items on influence) from 40 percent to 91 percent, with a mean of 67 percent.

Table 10-2. Number of schools showing indicated changes in teachers' perceptions of their influence on how their school is run and indicated changes in the principals' perception of their influence on how their school is run.

		Changes in teachers' views of their influence on how their school is run		
		Up	Down	
Changes in principals' views of their influence on how their school is run.	Up	0	1	1
	Same	5	4 (1)	9
	Down	4 (2)	2	6
		9	7	16

NOTE: Numbers in parentheses indicate the numbers of schools that had received some amount of organizational development training before May 1970; these numbers are included in the unparenthesized figures.

the school is run (item 70) is compared with the teachers' view of their influence over the way the school is run (item 54). The tabulation shows that no schools showed both parties experiencing an increase, but five schools did show an increase on the part of teachers while their principals reported no change in their own influence. This result indicates an increase in the total perceived influence in those five buildings, and constitutes some evidence that a total increase in influence can occur.

Note that our hypothesis does not claim that the cases of total increase will occur more often than not, but only that total increases are possible. This means that such cases should occur more often than can be explained by errors in the data (including, for example, inattention on the part of respondents). Since we set out to disprove the hypothesis which says that it is impossible for the total amount of power in an organization to change, only one bona fide case of a school in which the amount of power increased would disprove this hypothesis -- and in fact, we found five. Unfortunately, we know of no way to apply a test of statistical significance to this sort of hypothesis; the reader will have to judge whether the numbers of instances are convincing.

If the five cases of total increase in Table 10-2 were to be interpreted as a chance result of errors in assessment, we would have to believe that the answers given were the result of some strange phenomenon like the pencils of the five principals slipping when answering the questionnaire, or that the percentages of teachers in all five schools were somehow in error, or that some combination of these possible errors had occurred. This sees to us hard to believe.

Inspection of the numbers in the right-hand margin of Table 10-2 shows that there was a much stronger tendency for principals to indicate decreases than increases in their influence. This probably resulted, at least in part, from the regression effect. On the 1969 questionnaire, the majority of principals rated their influence over the way their schools were run at the top of the scale (great deal of influence). All others chose the next highest rating (considerable influence). In 1970, therefore, there was no way for most of them to indicate increases in their influence. At most, the majority could only report themselves at the top of the scale again and thus show no change. Consequently, the regression effect makes it probable that principals' ratings of their influence would go down. In sum, all 16 principals chose one of the two highest categories of answer in 1969 with most choosing the highest, but nevertheless nine chose the same answer again in 1970, and one chose a higher one; this result strengthens our conclusion that the principals in the "up" and "same" rows were actually maintaining their perception of influence or even increasing it. With the regression effect in mind, we can put more confidence in the interpretation that the five principals of the five schools in the "up" column and "same" row did not feel any diminution of their own influence while their teachers were perceiving an increase of theirs.

Parenthesized numbers in Table 10-2 tell the numbers of schools that had received some amount of organizational development training. The results for those schools do not support the hypothesis that trained schools are more likely than others to show an increase in total influence.

Table 10-3 shows the results obtained by classifying the responses of principals and teachers to the third and fourth items. It compares the principals' views of their influence upon their teachers (item 71) to the teachers' views of their influence upon their principal (item 55). In one school, both principal and teachers reported increases in their influence with each other. In six schools,

Table 10-3. Numbers of schools showing indicated changes in teachers' perceptions of their influence with their principal and indicated changes in principals' perceptions of their influence with teachers.

		Changes in teachers' views of their influence with their principal		
		Up	Down	
Changes in principals' views of their influence with teachers	Up	1	2	3
	Same	6(1)	3(1)	9
	Down	4(1)	0	4
		11	5	16

teachers reported an increase in influence, while principals reported maintenance of influence. This makes a total of seven out of sixteen schools where total influence between teachers and principals increased. In this comparison, as in the previous one, the principals' ratings of their influence were concentrated at the upper limit of the scale on the 1969 questionnaire. Thus, there was a regression bias against their reporting increased or equivalent influence with their teachers in 1970. As in the previous case, this gives added strength to the conclusion that the data do support the hypothesis that increased total influence is possible. But again, the distribution of the three schools that received organizational development training does not support the second hypothesis; only one increased in total influence.

Table 10-4 shows the results of distributing only the teachers' responses from twenty schools to the first two items. Tables 10-2 and 10-3 compared the principals' ratings of their own influence with the

Table 10-4. Numbers of schools showing indicated changes in teachers' perceptions of their influence on how the school is run and indicated changes in teachers' perceptions on the principal's influence on how the school is run.

		Changes in teachers' views of their own influence over how the school is run.		
		Up	Down	
Changes in teachers' views of the principal's influence over how the school is run	Up	7(2)	3	10
	Down	5	5(1)	10
		12	8	20

teachers' ratings of their own influence. Table 10-4 makes the comparison between changes in perceived influence of the principal and of the teachers solely from the teachers' point of view. In seven schools, teachers reported increased influence for both the principal and themselves. Since most teachers rated their principal's influence at or near the top of the scale in 1969 (considerable influence or great deal of influence), any changes that were random rather than purposeful would be more likely to be decreases than increases. As in the case of the principals' ratings, this regression bias adds strength to the conclusion that the data support the hypothesis of the possibility of increased total influence.

Teachers in two of the three schools that had received organizational development training rated both themselves and their principals as agining influence over how the school was run. These results do not, in our opinion, constitute strong evidence that the training was effective in altering perceptions of influence especially in the light of the poor showing of these schools in Tables 10-2, 10-3, and 10-5.

Table 10-5 shows the teachers' views of changes in the principal's influence with them in comparison to changes in their own influence with the principal. In four schools, teachers reported increases in both their influence and the principal's influence. This again lends support to the hypothesis that an increase in total influence is possible. The same regression bias mentioned in previous comparisons strengthens the conclusion.

Table 10-5. Numbers of schools showing indicated changes in teachers' perceptions of their influence with the principal and indicated changes in teachers' perceptions of their principal's influence with them.

		Changes in teachers' views of their influence with their principal		
		Up	Down	
Changes in teachers' views of the principal's influence with them	Up	4(1)	6	10
	Down	7(1)	3(1)	10
		11	9	20

We have now displayed data on perceived influence of two kinds, sometimes comparing principals' perceptions with teachers' perceptions, and sometimes comparing both directions of influence solely within teachers' perceptions. Since some schools that showed a total increase of influence were found in all four tables despite the changing comparisons, we think the hypothesis is strongly supported that it is not necessary in a school for the principal to feel his or her influence diminished when teachers feel theirs increased, nor for teachers to feel the principal's influence to be decreased when they feel their own increased.

The question remains, of course, whether influence actually changed in the cases where the school people perceived that it had done so. Unfortunately, we have no outside judgments of actual influence changes in these schools. Still, we should not treat perceptions of this sort lightly. We think a good argument can be made that perceptions on the part of the people involved in influence processes can sometimes be more important than objective indicators in predicting the likelihood that these people will attempt to influence each other. Even when a principal has rejected a series of overtures from teachers, for example, those teachers are likely to bring new influence attempts if they perceive that the principal remains open to further alternative ideas. If we adopt the view that power is increased when interaction is maximized, the readiness of members in the organization to initiate that kind of interaction is probably as good an indicator of the amount of power available in the organization as an outside or more "objective" indicator.

Results for Secondary Hypothesis

To give a larger meaning to the two primary hypotheses discussed so far, we compared perceived influence levels with responses of the same persons to still another questionnaire item. This item asked respondents to rank order the importance of five different reasons for going along with things their principal suggested. The five reasons portrayed five bases of social power set forth by French and Raven (1959): reward, coercion, legitimate power, referent power, and expert power. Our secondary hypothesis was that among staff with high levels of shared influence, larger percentages of teachers would indicate expertness and likableness (referent power) as reasons for accepting the suggestions of the principal, and lesser percentages would indicate the other bases. In testing the various comparisons possible, we found the results invariably to be in the direction supporting the hypotheses, though the Corners Test (for which see Mood, 1950) reached the .05 level of significance only in one instance. This result, to the extent that we should trust it, conforms to the implication of the theory we presented in Chapter 3; namely that increased collaboration and mutual influence must rest on the satisfactions of activity, achievement, power, and affiliation, and not on control by authority (rewards from the principal), coercion, or mere formal rules (legitimation).

Discussion

Our data give reasonable support to the first primary hypothesis that an increase in the total amount of influence available within a school can occur -- that gains for teachers need not be offset by equivalent losses by the principal. The number of schools that showed a decrease in total influence, those located in the lower right cells of the diagrams, add further support to Tannenbaum's general hypothesis that the total amount of influence available in an organization is variable. Further research will be necessary to determine if these increases and decreases co-vary with evidence of increasing or decreasing collaboration between levels of hierarchy in school or district.

Tannenbaum's theory suggests that increases in total influence in an organization are related to the amount of interaction and mutual influence among the members. The interventions for organizational development that motivated the research described here were intended to increase the amount and effectiveness of collaborative working relations among school people. The second primary hypothesis of this study, that schools receiving training for organizational development are more likely to show increases in total influence than schools which do not receive such training, follows logically. The data, however, do not support the hypothesis. This may be because the hypothesis is incorrect. Another possibility is that changes in collaboration and mutual influence did occur in trained schools, but there was a lag in the teachers' and the principals' awareness of their changing influence with each other. Approximately two months elapsed between the last portion of the training and the second administration of the questionnaire. Whether this is a sufficient period of time for newly defined working relationships and organizational norms to become stable is doubtful. Evidence offered by Murray (1973) suggests that one to two years may be necessary for perceptions of changed patterns of influence in school to catch up with the actual nature of new working relationships. The amount of time that elapsed between the training and the final collection of these data may have been too brief, in one or more trained schools, for incipient changes in perceived influence to have occurred. Further, there is the possibility that the training of the schools in this study was too brief and too superficial to effect changes in the patterns of influence. Wyant's (1972) study, condensed in Chapter 6, showed that new patterns of communication of the sort intended by organizational development are likely to occur only after about 25 hours of training, at a minimum. Of the three trained schools in this study, one had twelve hours by 1970, one had fifteen, and one eighteen. Finally, only three trained schools appear in this study, and this is such a small sample that only the very strongest effects could be discernible. Considering all these factors, we do not reject the hypothesis about the effects of training. A better test of the hypothesis must await data from schools where time has been allowed for perceptions to develop and where adequate amounts of training have been given.

This small study began with questions about whether it is possible for a principal to share power with teachers and not lose some of his or her influence over how the school is run. While the results of the study do not give full answer to these questions, they do offer evidence worth attention. To school people interested in promoting greater collaboration among teachers and administrators, these findings encourage the hope that all parties can benefit from working together.

Chapter 10

INNOVATIONS: HOW LONG DO THEY LAST?

by Runkel

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Chapter 10

INNOVATIONS: HOW LONG DO THEY LAST?

Runkel

(final)

In the last two chapters, we examined outcomes that we believe depend chiefly on second-level skills -- the group skills that enable subsystems to coordinate the activities of their members, define roles, and bring productive influence upon one another in the interests of their task. In this chapter and the next, we move to third-level skills -- the capacity of the school for performing as an entire system. We begin with a substudy of the way the school as a whole acts as a processor of innovations.

During the years 1968-72, elementary schools in many parts of the nation were being urged to adopt new modes of organization; these included team teaching, differentiated staffing, the "open concept" school, and the like. In Kent, Auburn, and Federal Way, many elementary schools tried to bring about one or more of these changes in their organization. In Chapter 6, we put the label "collaborative" on those schools that had made visible strides toward the new mode of organization. This chapter presents evidence on the sequences in which efforts were undertaken toward these and several other sorts of innovations and on the effects that training for organizational development had on these sequences.

Sometimes we have heard researchers or even school administrators urge a school or district to undertake an organizational innovation because, even if it should fail, "it can't do any harm." We disagree. Trying a new thing, especially a complex new thing that requires new interpersonal arrangements, is costly. Change always requires more energy than routine does. If a school spends energy beyond its regular budget for a year or two and then finds itself no better off than before, or worse off, the costs are serious. First, the regular program will inevitably have suffered some neglect with the hope that the new thing would compensate. Second, the school will have lost what it might have gained if it had chosen a more suitable innovation. An third, the prognosis for any attempt at innovation in the near future will have worsened, since a "failure" always weakens confidence in the possible benefits of the next innovation effort. The amount of energy and enthusiasm that is nowadays draining away from teachers into aborted innovation must be stupefying. This chapter deals with innovations that succeed and those that fail and adds information to that we have already given on how to avoid abortive attempts at organizational change.

How can we judge whether innovations are being carried out successfully? The Assistant Superintendent for Elementary Education told us that Kent was "the first in the Northwest to use team teaching in the lower elementary grade curriculum" in the spring of 1968. In 1968 or 1969, all of the elementary schools in Kent attempted collaborative arrangements for instruction, and most elementary schools did likewise in Auburn and Federal Way. Following negotiations between the Kent Education Association and the district administration, instructional aides had been added to some primary classrooms in the fall of 1968. The local newspapers told us that school K03 had been remodelled to include two rooms without partitions in 1968-69, and K05 was extensively remodelled in the same year to remove interior walls to facilitate team teaching in two of its four wings. The Assistant Superintendent for Elementary Education told us that Kent was only "a year or two behind Renton and Tacoma" in building open-concept schools. At first glance, it seemed that these schools were making solid efforts in the direction of collaborative innovation.

In Chapter 6 (see Figure 6-1), we classified eight of 27 schools as exhibiting collaborative structure in 1970, and 15 of 30 in 1972. The rates of success in achieving collaborative structure that we gave in Chapter 6, however, were based on a rather undemanding criterion. Later in this chapter, we shall use a more stringent criterion, and we shall find that the rates of success in achieving collaborative structure are very much lower than we at first suspected.

It is likewise very difficult to ascertain nation-wide base rates of success in bringing about organizational change in schools. One reason, of course, is the problem of getting unambiguous indicators of success.* Another reason is that no one has undertaken a large-scale survey of projects of this sort, with or without adequate criteria of success. Our only recourse is to try to be alert to published accounts of projects in organizational change.

During the 1968-69 school year, Pellegrin (1969) studied four schools that had installed the multiunit plan and also four control schools selected for him by the Wisconsin R&D Center for Cognitive Learning. Before writing up his results, Pellegrin had already dropped one "multiunit" school and its control school from consideration, because "the fourth school had not sufficiently implemented the multiunit program to justify its inclusion" (p.1). One of the remaining three schools had no Instructional Improvement Committee, a liason group comprised of unit leaders and considered essential to the multiunit structure designed by the Wisconsin R&D Center (see, for example, Klausmeier, Quilling and Sorenson, 1971). In Pellegrin's sociometric diagram of interdependence within and between units in the schools, no unit leader was indicated as perceiving any needful interpendence with other unit leaders, though the Wisconsin model calls for the unit leaders to make up the Instructional Improvement Committee. Of the three "multiunit" schools Pellegrin described in his 1969 paper, he said,

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* Charters and Jones (1973) have discussed this problem in an article aptly titled, "On the risk of appraising non-events in program evaluation."

> It is our conclusion that no single "form" or model" of multiunit organization has been implemented in the schools we studied. There is, as a matter of fact, considerable variation in structure, policies, and practices (p. 11).
>
> ... we find variations in schools and from one unit to another within a school. ... it is possible for virtually all relationships to be essential ones [as judged by the individuals involved] in one unit, while another unit in the same school has a pattern containing a mixture of essential and dependence relationships as well as a lack of indicated relationships of either type. Thus, while some collaborative activity is found in all schools, its extent is uneven, reflecting differential success in the development of interdependence relationships (p. 4).

In 1970-71 in Oregon, Charters and Pellegrin (1972) studied the course of events in two elementary schools, a junior high school, and a high school that officially began differentiated staffing in the fall of 1970. Of the state of affairs at the end of that academic year, Charters and Pellegrin said,

> It was clear to the researchers that no monumental strides had been taken in any of the schools during this brief period to convert previously existing programs to a new form. Indeed, little concerted attention had been given to what the new form might be. Two of the four schools withdrew from the formal DS project at the end of the school year; two intended to continue (p. 11).

In 1972, Carlson, Packard, Wolcott, and Everhart of CASEA (see Charters, Everhart, Jones, Packard, Pellegrin, Reynolds, and Wacaster, 1973), set out to study the progress of schools that have spent a great deal of energy moving toward multiunit functioning. They sought the most "successful" schools available:

> The researchers first queried a panel of authorities familiar with Wisconsin schools ... as to which had most fully adopted the MU design. The panel reached consensus on ten. Then CASEA investigators visited the ten schools .... The second screening led to the selection of four top-rated schools (p. 9).

Packard's (1973) account of these schools implied that they were still operating noticeably below the prescribed pattern. He said, "... we refer to the implementation stage when the school decides it has achieved its goals and cuts back on its innovative efforts .... after two years or so, we found a novel implementation problem ... that is, ending implementation efforts too soon" (pp. 118-119).

A number of researchers have documented cases of complex organizational innovations (mostly team teaching, differentiated staffing, multiunit structure, open concept, and the like) that failed in one way or another to attain maturity. Goodson and Hagstrom (1971), Lake and Callahan (1971), and Derr (1970) have reported disappointing efforts in several schools and among district administrators. Sarason and Sarason (1969) pointed to the lack of revised social organization in the classroom as the chief reason that the "new math" failed to reach its goals; the evidence on this topic from several schools was summarized by Sarason in 1971 (pp. 29-48). Single schools in which organizational innovation failed to take hold have been studied by Jones (1973), Murray (1973) Simons (1974), Smith and Keith (1971), Smith (1972), Starling (1973), and Wacaster (1973). Several studies have reported success in some ways and not in others: Anderson and Lake (1974), Gentry and Watkins (1974), Langmeyer, Lansky, and Reddy (1973), and Whitmore, Crist, and Marx (1974). It is too soon to judge the success or failure of several other projects under way at this writing; an example is the work in organizational development at Louisville, Kentucky (see Doll, Love, and Levine, 1973).

To brighten the dreary picture we have painted so far, some researchers have reported projects in organizational change in schools that seem to us successful on balance; among these have been Duffin, Falusi, and Lawrence (1972), Essig (1971), Favors (1971), Flynn (1974), Keutzer, Fosmire, and Diller (1971), Murray (1973), Schmuck and Runkel (1970), and Smith (1972). Those of Murray and Smith are summarized in Schmuck, Murray, Schwartz, Smith, and Runkel (1975). To this short list, we can now add the case of the Kent cadre, described in Chapters 2, 4, and 12.

This list of happy and unhappy cases gives us a very uncertain count upon which to estimate a general rate of success. Not only do the criteria for success or failure vary from study to study, but there are undoubtedly many projects, reported in fugitive literature or not reported at all, that have not come to our attention. But at the least, it seems clear that organizational change in schools is a very risky business.

This chapter will add a little more detail to the picture of organizational change in elementary schools by offering some tentative answers to several questions. If an innovation does not take hold, how long will it typically take to fade from view? Which kinds of innovations are more difficult to achieve? Do innovations have the character of fads? Can training in organizational development help a school to marshal its resources for innovation? What percentages of staff in schools become aware of the innovations going on in the school?

This chapter will present several major conclusions. First, achieving structural-organizational changes in schools is more difficult than bringing about collaboration among teachers in classrooms, curricular changes, or the changes we call "cloistered" innovations such as computer scheduling, audio-visual aids, and the like.

Second, the elementary schools in this sub-study usually meandered from one innovation to another (including periods with no innovations at all) in cycles of one or two years. There seemed to be a fad for team teaching and similar collaborative innovations in one district we studied in 1969 and in the other district in 1970. Only one school -- the one that had received the most hours of training in organizational development -- reported in two successive questionnaire-administrations two years apart that they were primarily engaged in the more difficult structural-organizational changes.

Third, if a school had unsuccessfully tried a collaborative innovation, it was very unlikely to try a complex structural innovation and not very likely to continue efforts toward the collaborative innovation. It was likely, however, to turn to curricular innovation.

Fourth, training in organizational development gave an important amount of help to some schools in dealing relatively expeditiously with the social pressure to adopt team teaching and similar innovations. Among untrained schools, six out of eight still had significant percentages of teachers reporting this kind of innovation in progress even though other independent evidence indicated that no significant effort in this direction was any longer being made. Either the innovative activity still going on in these schools was minor and somewhat isolated, or the communication in the schools was sufficiently unclear that a sixth to a third of the staff could erroneously believe that programs of work were going on that actually were not, or both. Our evidence indicates that training can ameliorate these conditions and enable a school to marshal its resources more effectively in dealing with innovations -- either to adopt them or to reject them firmly.

Fifth, being a new school rather than an old school did not significantly accelerate the process of adopting or rejecting innovations of the team teaching sort. Nor was being a new school connected with reporting distinctive patterns of priority among the types of innovations studied here.

Data

This chapter tells the story of innovations undertaken -- so far as teachers in elementary schools were aware of them -- in Kent and Auburn from 1968 to 1972. As one might expect, some schools showed widely oscillating percentages of respondents reporting innovations from year to year, while a few schools showed monotonic trends. The data will enable us to examine a variety of patterns.

The bulk of the data analyzed in this chapter came from only one questionnaire item -- this one:

Item 60. How about recent changes that could have useful effects on your school? Have there been any innovations, any new ways of doing things, that began during the last year or two that you think could have helpful effects in the school?

(1) ______________________________

____

(2) ______________________________

____

(3) ______________________________

____

(4) ______________________________

____

We intended the answers to this question to tell us something about how innovation is viewed from the inside. We intended the item to be an indicator of the subjective experience of innovation on the part of teachers-and-others.* We did not intend it to bring us an objective count of innovative schools such as the count of collaborative schools obtained by Wyant (described in Chapter 6). We used this item to ascertain the awareness or beliefs among the elementary school staffs about the different sorts of "new" and "useful" things going on in their schools. Obviously, the responses contained a mixture of what respondents experienced themselves and what they heard about from others, correctly or incorrectly.

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* Teachers, counselors, librarians, and others having direct contact with students, but excluding administrators, secretaries, custodians, cooks, bus drivers, and any part-time persons spending a greater portion of their time at another school.

Anyone who has worked in a school has participated in rumors that arise when the principal makes even a slight change in some teacher's duties; the news seems to travel in a few days to every nook and cranny. Yet many times, when a social scientist, an educational researcher, or even a planner from the district's central office comes bounding into the school with a plan that he or she thinks will radically alter the structure of the organization, teachers frequently do not seem to be able to characterize it sufficiently to write even a phrase about it in answer to a question such as the one we used. Surely, intended innovations are accompanied by serious efforts on the part of their promoters and the administrators of the school to inform the members of the staff, at least those who will be directly affected. Yet the data in this chapter revealed school after school in which perhaps no more than thirty percent of the staff say that a useful innovation of a particular sort has been going on in their school. Percentages this small or smaller show up frequently even though the questionnaire was given in the spring of the year (thus allowing time for new members to become familiar with the life of the school), even though the question asked for anything "that began during the last year or two" (thus allowing latitude for memories, and even though the question gave room for the respondent to write not only the thing most salient in his or her mind, but three other things as well. Surely, a "useful innovation" that does not come to the minds of two-thirds of a staff when given this sort of opportunity to mention it (or that they describe in such different ways that our coders thought the descriptions were of different types of things) is not having much of a focussed or commonly understood impact on the school as a whole. Of course, one other possible explanation for a minor percentage of a staff reporting innovative efforts is when a minor percentage are engaged in them and their efforts have not reached the awareness of the rest of the staff.

The Categories of Innovation

We originally asked our coders to use a large number of precise categoies when categorizing the responses, partly to see what sorts of information could be extracted. The coding went into cards that were stored away, and we (the analysts) did not look at any tabulations until late in 1970, long after we had ceased our forays into the Kent district with intent to influence their behavior. Then, after examining the data and discussing the codes with our chief of coders,* we decided the data would be most likely to answer the questions we wanted to ask if the original categories were pooled into five. The five categories are described below. We introduce here the letter-labels and word-labels we will use to describe the categories in the rest of this chapter.

---

* Mrs. Dorothy Van Cleef

A: Structural. The first category of responses contains those changes in the school's way of working that we postulated would usually put the greatest amount of stress on the organizational fabric. These are (1) changes that require reallocations of duties in several parts of the school, (2) changes in interpersonal roles that are usually perceived by the role-takers as increases or decreases in power or status, (3) changes in duties that challenge the person's conception of his or her professional ego, (4) changes that require checking by multiple persons whether a program is achieving its claimed purpose (and thus possibly challenging the competence of many), (5) changes that produce more two-way communication, and (6) changes that involve communicating stressful matters more often in groups instead of privately one-to-one. Into this category we brought together reports of institutionalized group problem-solving, rearrangements of power, evaluations of programs, program planning and budgeting, S-T-P problem solving, organizational development when named as such, and new school-wide norms for communication, as well as reports of new organizational structures such as a new and formalized "leadership team" composed of team leaders.

B: Collaboration in the classroom. Less stressful than structural changes are some of the new practices that affect fewer parts of the school -- perhaps only a cluster of teachers. This category of change carries considerable stress with it, however, because such innovations require at least some of the staff to change their expectations toward one another. The prime example is team teaching. Another is the new kind of interaction between teacher and students engendered by teaching the teacher the Flanders method of interaction analysis that we described in Chapter 5.

C: Curriculum. We put into this category all sorts of packaged curricula and other ways of managing instruction: new math, remedial reading, new schedules, inquiry training, ability grouping clustering grade levels, testing or screening students, and the like. Sometimes, of course, successful curricular innovation requires just as much collaboration among teachers as some of the arrangements we included under B-innovations. Sarason's (e.g., 1971) investigations attest to this. Nevertheless, in reading the free responses written in answer to our question, it seemed to us that most of the arrangements that were mentioned for managing curricula were not calling for as much collaboration as those we classified as B-innovations.

D: Cloistered innovations. Here we put innovations that can take place away from the ken of most teachers: new methods of bookkeeping or managing finances, changes in buildings or equipment, or sending individuals off to training to upgrade their skills. We also tossed into this category a few miscellaneous changes such as new ways of hunting for good ideas and changes in attitudes; these miscellaneous items were mentioned with extreme rarity.

N: Nothing. This is the category of no innovation at all. It is here we put the responses of those who mentioned nothing in answer to the question.

In summary, we have five categories representing a presumably ordered sequence from the most difficult innovations in an interpersonal and organizational sense (category A) to the least difficult (category N). Most of the things classifiable in category D can no doubt be brought about by one or two well-placed and determined members of the organization without any organizational supports, but there is evidence that not even the curricular innovations (category C) have a good prognosis for success when teachers receive training merely in content and pedagogy without attention to organizational supports: see, for example, Sarason (1971), pp. 29-48).

By counting the number of reports of each of the above types of innovation and converting to percentages, each school can be characterized by a string of percentages, each cumulated over the four possible opportunities to answer. For example, the cumulated percentages of reports of innovations in the five categories that occurred in school K01 in Kent in 1968 are as follows:

Letter label	Word label	Cumulated percentage
N	Nothing	59
B	Collaboration in the classroom	50
C	Curricula	14
D	Cloistered	14
A	Structural	9

The school can be characterized by the string of category-letters alone. In this chapter, we shall use arrays of letters -- such as NB(CD)A from the chart above -- to indicate the categories of innovations in a school from most frequently mentioned to least frequently mentioned; the parentheses indicate that the categories enclosed in them are tied in their percentages.

Obviously, the percentages of persons naming the five kinds of innovations can sum to more than 100, because each person could have named as many as four innovations. But it is also possible for a single category to accumulate percentages reaching above 100. The instructions to coders and the manner of pooling the finer categories into fewer had the effect of allowing a single respondent to name a particular category more than once. We simply counted the number of reports of each of the five categories on each of the four lines provided by the questionnaire item, in turn, and summed the percentages for each category across the four lines. If enough people mentioned the same kind of innovation more than once, the total for the school exceeded 100 percent.* The final percentage for a category, then, is a weighted measure of the density, so to speak, of the perception of that kind of innovation in the school, not an actual percentage of the persons who believed that kind of innovation to be going on. We preferred this measure to the simple percentage of respondents, because we wanted to know, primarily, the relative bulk, density, or salience of awareness in the school concerning each kind of innovation compared to the others.

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* Appendix 10-A gives more detail on the manner of coding the responses.

Results I: Salience of Innovations

We shall first examine the relative salience of the five kinds of innovations in the responses of the schools. In this first analysis, we shall disregard the numerical cumulated percentages and pay attention only to the rank order of those percentages in each school.* For example, if we say that the rank order of the innovations in school K02 in 1970 was CNBAD, we shall mean that the greatest number of responses to the questionnaire item indicated curricular innovations (C), the second greatest number came from respondents who mentioned no innovation (N), the kind of innovation third in bulk of responses was the collaborative sort (B), the fourth sort was structural (A), and the least often mentioned was the cloistered sort (D). By looking at the rank orders, especially at the kind of innovation ranked first, we can tell the kind of innovation that attracted the attention of the greatest number of schools in a district in each year; we can also tell how the bulk of reports in a school changed from one innovation to another as the years went by.

Salience of Collaborative Innovation

Looking at Table 10-1, and paying attention especially to the letter at the head (left end) of each rank order, one can see with a few sweeps of the eye that the pattern for a typical school was to change every year or two the innovation that was most salient there in the perceptions of its staff. In school K01, for example, the responses in 1968 indicated that the salient thing for most people about innovations was that they were not aware of any (category N). In 1969 in that school, the greatest bulk of awareness went to collaborative innovations (B). In 1970 and 1972, the greatest percentage of responses in that school again came from non-response.

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* The numerical cumulated percentages for the elementary schools in the two districts are shown in Appendix 10-B.

Table 10-1. Rank orders of cumulated percentages of reports of five kinds of innovation among elementary schools in Kent

School number	1968	1969	1970	1972
K01	NB(CD)A	B(ACN)D	NC(AB)D	NA(BCD)
K02	(BD)(CN)A	(ACN)BD	CNBAD	CB(AN)D*
K03	NC(BD)A	B(CD)NA	CD(BN)A	NB(CD)A
K04	BNCDA	CDBNA	CD(BN)A	C(AD)BN
K05	BCNDA	B(CD)NA*	BNCDA	NCBAD*
K06	NCBDA	BNDCA	NBCDA	CBADN
K07	NCDBA	BCAND	CBNAD	NCDAB
K08	BDNCA	B(DN)CA	BNCDA	CNDBA
K09	NBCDA	BND(CA)	(ND)(BC)A	NCBAD
K10	BNCDA	BNDCA	ABC(DN)	CABND
K11	no data	BCDNA*	BCDNA	CANBD*
K12	no data	B(CD)AN	(AB)(CN)D*	ADCNB*
K13	no data	no data	CBADN*	NACBD*
K14	no data	no data	no data	NCBDA*
K15	no data	no data	no data	N(ABD)C*

* This school received OD training between this questionnaire administration and the time of the previous one.

There were four schools in which the majority of staff reported the same kind of innovation over three consecutive questionnaire-administrations: schools K05 and K08 reported collaborations (B) as being most salient in 1968, 69, and 70; and schools K02 and K04 reported curricular innovations (C) as most salient in 1969, 70, and 72. First-ranked reports of structural innovations (A) were rare.

If a large percentage of reports from a school describe something like team teaching going on in one year, but then in a later year the largest percentage of reports describe some other kind of innovation, what does this mean? It could mean that team teaching had been installed smoothly and had become a routine matter, so that it was no longer considered a "new thing" that would come into very many minds in response to our question. The drop in percentage might also mean that the effort to install team teaching was unsuccessful, and the school has given up the effort so thoroughly by the later year that few staff members any longer perceive it to be something that "could have helpful effects in the school." Both of these two conjectures seem more reasonable when the two times being compared are two, three, or more years apart (such as 1969 and 1972), because the question asked about things "that began during the last year or two."

In the case of cumulated percentage that is neither very high nor very low, we infer that the staff is of different opinions about the sorts of innovations going on in their school. In such a case, we may also infer that the innovative practice or structure is still in the process of becoming established, that it is established only in a part of the school, or that it is in the process of fading out. That is, we make these inferences in the case of moderate cumulative percentages (say 20 percent to 50) reported for complex innovations usually meant to affect the entire school, such as those of collaboration (B) or structure (A).

Let us now look again at Table 10-1. In 1968, about half the schools gave their greatest cumulated percentages to collaborative innovations (B) and about half gave their largest percentages no innovation (N). By 1969, ten of the twelve schools were ranking collaborations (B) in first place. Clearly, by 1969 many more people in many more schools had the opinion that something "new and useful" had been going on in their schools, and most of the responses described things that seemed to our coders to be collaborations about classroom matters -- category B. After 1969, however, the pattern changed. The number of schools rose in which absence of innovation outranked any type of innovation. In 1970, absence of innovation ranked first in two schools (K01 and K06) and was tied for first in another (K09). In 1972, eight of fifteen schools ranked absence of innovation first. At the same time, the number of schools giving first rank to collaborations (B) dropped. Only three schools ranked B-innovations first in 1970; school K12 placed them in a tie for first place with A-innovations. In 1972, no school ranked B-innovations first.

The corresponding data from the elementary schools of the neighboring district of Auburn were similar. Table 10-2 shows the rank orders of innovations. There we see the same two trends we noticed in Kent, though the trends were not as strong, and they appeared one year later. In 1968, four of seven schools ranked lack of innovation (N) first, and in two schools the lack of innovation was tied for first place with some particular kind of innovation. In 1968, one school ranked collaborations (B) first, and one school put B-innovations in a first-place tie with C and N. By 1969, two schools were ranking B-innovations alone in first place. In 1970, three schools out of nine put B-innovations in first place and two more put them in a tie for first place. By 1972, however, reports of collaborations had fallen off: one school put B-innovations alone in first place and two schools put them in a tie for first place. As in Kent, the reports of

Table 10-2. Rank orders of cumulated percentages of reports of five kinds of innovation among elementary schools in Kent

School number	1968	1969	1970	1972
A01	(BCN)(AD)	BDCNA	BNCDA	See note
A02	BNCDA	C(BN)DA	DCN(AB)	CB(AD)N
A03	no data	D(BC)NA	no data	no data
A04	N(BD)CA	CBNDA	BNDCA	CABDN
A05	ND(ABC)	NDB(AC)	(BD)A(CN)	See note
A06	NBCDA	NC(BD)A	NADBC	(BC)D(AN)
A07	NC(BD)A	BNCDA	DB(AN)C	BCN(AD)
A08	no data	CBNDA	AB(CD)N	C(BD)AN
A09	(CN)DBA	NB(ACD)	(BN)(ACD)	no data
A10	no data	no data	BC(AN)D	NCBDA
A11	no data	no data	no data	NCB(AD)*
A12	no data	no data	no data	(BC)N(AD)

* This school received training in OD in August of 1970.

Note: Between the questionnaire administrations of 1970 and 1972, schools A01 and A05 were combined into one new school: A12.

B-innovations rose to a peak and then fell off. The difference was that the peak in Auburn was lower, and it came a year later. In nine of these twelve elementary schools, B-innovations at some time appeared in first rank.

The amount of meandering from one innovation to another was about the same in Auburn as in Kent, taking into consideration the smaller total number of schools. Only two schools in Auburn ranked the same category first over three administrations of the questionnaires. School A01 put B-innovations first over the first three years, and reports of no innovation predominated in school A06 over those years. The case of school A01, however, needs an additional note. In 1972, that school had combined with A05 to form the new school A12, and the new school still put B-innovations in first place, though tied with curricular innovations (C).

Paucity of Structural Innovation

Looking again at Table 10-1, we see that reports of structural innovations (type A) were rare. From school K02 in 1969, there were equal number of mentions of innovations of types A and C and of nothing (N). School K10 ranked A-innovations first in 1970, but then put curricular (C) innovations first in 1972. School K12 put A-innovations first (tied with B-innovations) in 1970; it also put A-innovations first in 1972. None of the actual percentages of reports of A-innovations indicated that an entire staff was aware of them, though the percentages in school K12 were significantly higher than in the other two schools: the percentages were 35 for school K02 in 1969, 14 for school K10 in 1970, and 52 and 41 for school K12 in 1970 and 1972. Reports of structural innovation were even more rare in Auburn than in Kent. In Auburn, only one school in one year put A-innovations first: A08 in 1970.

Trends in Collaborative and Structural Innovation

Two movements that we have described so far seem to us remarkable. One was the large surge of schools in and out of collaborations (B). In Kent, the proportion of elementary schools ranking B-innovations first went from about half in 1968 to five-sixths in 1969 and then dropped to about a quarter in 1970 and to none in 1972. The other movement was the very small one, almost entirely unsuccessful, toward structural (A) innovation. Only three schools in Kent (K02 in 1969, K10 in 1970, and K12 in 1970 and 72) managed to bring A-innovations into first place, and only one of them (K12) managed to keep them there for two consecutive questionnaire-administrations.

We mentioned earlier that these school districts were experiencing considerable pressure to undertake collaborative arrangements among teachers. There was also pressure to undertake innovations of the sort we are calling structural. One of the innovations we classified as structural was management by objectives, and the newspapers in Kent told us that 1968-69 was a big year for management by objectives. An outside consultant, Heath Tachna, was hired to explain management by objectives to administrators. Supervisors heard about supervision by objectives, and teachers heard about teaching by objectives. During the next two years, the job of converting the district to management by objectives was taken over by an assistant superintendent, and that work was assigned highest priority among his duties; more than once, he described to us the series of seminars on this topic he was conducting in various sectors of the district.

Despite the fact that the Kent district devoted considerable energy to promulgating management by objectives, that innovation and other structural innovations showed up in answer to our question only rarely. If we assume that, given equal awareness of possible innovations and access to help in bringing them about, schools are more likely to attempt easier innovations than more difficult ones, then this contrast between the A-type and the B-type in frequency of trial lends some support to our hypothesis that the structural type is more difficult than the collaborative type.

Criterion for School-wide Collaboration

In September of 1973, Spencer Wyant of CASEA visited the Kent and Auburn Districts to gather evidence from local witnesses of the extent to which innovations of type B had been present in elementary schools at the time of the April 1972 questionnaire-administration. He used a three-stage winnowing procedure, starting with a central-office administrator and ending with interviews of leaders of teaching teams in the schools themselves. Three of his final questions discriminated clearly among schools, and were scalable without error among these schools in the sense variously known as cumulative, scalogram, or Guttman. If all Wyant's interviewees in a school said "yes" to one of these questions, we classified the school as having "said yes" to that question, otherwise "no."

The three questions (paraphrased) were:

1. Do teaching teams meet at least weekly?
2. Does a leadership team exist?
3. Does the leadership team meet at least weekly?

The criterion we used in Chapter 6 allowed schools to be classified as collaborative even if they were collaborative only "on paper." That is, the criterion of Chapter 6 could be satisfied if the principal and teacher Wyant interviewed agreed that persons had been officially designated as belonging to the team or committee, that unit leader positions had been assigned, and that all teaching personnel had been assigned to teams. Our new criterion, in contrast, required that teaching teams and the leadership team actually meet at least once a week. The criterion used in this chapter, in short, requires regular activity, not merely the "existence" of the teams and positions. Furthermore, Wyant reported that "in no school were all the criteria fully satisfied." Putting together the fact that the criterion of Chapter 6 was less stringent than the criterion in this chapter with the fact that none of the "collaborative" schools fully met the former criterion, it is clear that there will be fewer schools meeting the criterion of this chapter than met the criterion of Chapter 6.

We assigned to each school a "B-score" equal to the number of the three questions set forth above that the school "answered yes."*

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* Even a score of 3 on this "test" is not a stringent criterion in the sense of the criteria of Charters and Jones (1973). Nevertheless, this test was sufficient to discriminate the very few schools that had gone even this far from the others.

(no school "answered yes" to the third question unless it had answered yes to the first two, and none answered yes to the second unless it had answered yes to the first.) Here are the 1972 B-scores for the schools in this study*:

School	B-score	School	B-score
K12	3	K14	1
K15	3	A04	1
A11	2	A06	1
K05	1	A10	1
K11	1	All others	0

---

[*] In contrast to this list, central-office personnel mentioned 17 elementary schools (6 in Kent, 6 in Auburn, and 5 in Federal Way) to Wyant that they thought had collaborative structure in 1970 or 1972. After interviewing principals and teachers in these schools, Wyant ended by classifying eight schools as collaborative in 1970 (4 in Kent, one in Auburn, and 3 in Federal Way) and 15 in 1972 (6 in Kent, 4 in Auburn, and 5 in Federal Way).

In the next section we will examine what sorts of innovations certain "successful" schools attempted and look at the sequences in which they attempted them.

Appearance of Curricular Innovation

So far, we have paid attention to trends in reports of structural innovation (A), of collaboration among teachers (B), and of no innovation (N). Can we learn anything from Tables 10-1 and 10-2 about the other kinds of innovation? We shall not try to infer anything about cloistered innovation (D); this was the kind of innovation that can be carried through successfully without many people being aware that others are engaged in it, and frequency of reports about these innovations of low visibility would mean little. But let us look in Table 10-1 for instances in which schools ranked curricular innovations (C) in first place. In 1968, no school did so. In 1969, two of twelve schools (17 percent) did so; in 1970, five of thirteen (39 percent), and in 1972, six of fifteen (40 percent). The thing that strikes us here is that C-innovations reached their maximum the year after the peak of the B-innovations.

Some questions immediately come to mind: after a staff had attempted collaboration, what was likely to happen next? -- would the staff successfully establish school-wide collaboration? -- if it did not, would it continue collaborative efforts, or would it change to the A-type, to the C-type, or give up trying innovations? -- and which schools actually reached school-wide team teaching or multiunit structure?

These questions are more easily answered if we first put the data of Table 10-1 into the form of Table 10-3. The new table does not collect the rank-orders by specific years; in Table 10-3 the rows are arranged so that all the first occurrences of B-innovations ranking in first place fall in the same column. To make this table, what we did, in effect was to slide the rows of Table 10-1 left and right so that the first occurrences of B-innovations all fall in one column. We also re-ordered the rows for easier discussion. Schools K13, K14, and K15 are omitted from the table because neither A nor B appeared first in any of their rank orders. The table also shows the rank-orders of innovations in each school one, two, and three years after the first time they ranked B-innovations first, and for some schools, it shows the rank-orders in the year previous to the first occurence of B-innovations.

The criterion for school-wide collaboration. Table 10-3 notes with double asterisks the schools that succeeded in achieving school-wide collaboration according to our new criterion. The B-scores that were greater than zero among the twelve Kent elementary schools listed in Table 10-3 are these:

School	B-score
K05	1
K11	1
K12	3

Table 10-3. *Rank orders of percentages of five kinds of innovation among Kent elementary schools, rearranged by first occurrence of B-innovations in first rank*

		First occurrence of B-innovations	Years following first occurrence of B-innovations		
School number	Earlier years	in first rank position	First year	Second year	Third year
K05**		BCNDA	B(CD)NA*	BNCDA	NCBAD*
K08		BDNCA	B(DN)CA	BNCDA	CNDBA
K10		BNCDA	BNDCA	ABC(DN)	CABND
K11**		BCDNA*	BCDNA	CANDB*	
K02		(BD)(CN)A	(ACN)BD	CNBAD	CB(AN)D*
K12**		B(DC)AN	(AB)(CN)D*	ADCNB*	
K03	NC(BD)A	B(CD)NA	CD(BN)A	NB(CD)A	
K04		BNCDA	CDBNA	CD(BN)A	C(AD)BN
K07	NCDBA	BCAND	CBNAD	NCDAB	
K01	NB(CD)A	B(ACN)D	NC(AB)D	NA(BCD)	
K06	NCBDA	BNDCA	NBCDA	CBADN	
K09	NBCDA	BND(CA)	(ND)(BC)A	NCBAD	

* This school received OD training between this questionnaire administration and the time of the previous one.

** This school was judged as having successfully established a B-innovation as measured by responses to interviews in 1972.

Innovative consequents of collaborative effort. Table 10-3 shows that among these 12 schools that undertook innovative efforts toward collaborative modes of functioning (the B-innovations), most did not continue that kind of effort for longer than one year. Of the four that did continue through more than one year (schools K05, K08, K10, K11), two (K05, K11) had received some OD training, and these were two that actually succeeded at collaboration according to our new criterion.

When schools relinquished efforts toward collaboration (the B-innovations), they did not typically then move into the more difficult realm of structural innovation (A-innovations). Only three schools (K02, K10, K12) made the attempt. Two of them (K02 and K10) moved into structural innovation for one year (K02 weakly) and then quickly moved into the presumably easier C-innovations. The third school (K12) was the school that had received the largest amount of OD training; it moved into structural innovation and stayed there through our last assessment in 1972; furthermore, our criterion tells us that this school, too, was successful in establishing collaborative functioning and structure. Only three schools (K05, K11, K12) succeeded in establishing school-wide collaborative functioning or structure, though all twelve tried to do so, and these three were the three that had received OD training during their efforts.

Of the seven schools that tried the collaborative (B) innovations for one year only, we have mentioned one (K02) that tried structural (A) innovation; this school did not receive training until after the events we are describing.

The remaining six schools put B-innovations in the first rank of reports for only one year which signified to us that these innovations had been abandoned. After these unsuccessful efforts toward collaboration (B), three schools (K03, K04, K07) turned to curricular (C) innovation and never returned to the more difficult sorts. The other three (K01, K06, K09) gave up serious efforts toward innovation (this is indicated by lack of innovation -- N -- appearing in first rank). One (K06) of these three managed to put curricular (C) innovations in first rank during the last year of our assessment. None of these last six schools received any training or consultation for organizational development.

In brief, all of these twelve schools told us that their biggest innovative effort in 1968 or 1969 was toward collaboative functioning, but we have seen from these schools' B-scores that only three actually achieved it school-wide. Those three were the three that had received OD training or consultation before or during their innovative effort. Seven schools (counting school K02, which briefly and weakly tried structural innovation before turning to curricular) stayed with the collaborative effort only one year, failed, and then either turned to curricular (C) innovation or gave up any serious effort toward innovation. Two other schools stayed with the collaborative effort longer than one year, failed, and then turned to curricular innovation.

We conclude: (1) the more difficult organizational changes (A and B) will usually require outside help, such as organizational development training, (2) if a school fails in its collaborative efforts (B), it will not then usually try the still more difficult structural (A) innovations, but (3) even if a school fails in collaborative innovation (B), it may still be ready to undertake the less difficult curricular innovations.*

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* An alternate or competing hypothesis might be that attempts at curricular innovation were appearing more or less regularly in districts, and that a fad for collaborative innovations among teachers, such as team teaching, simply caused some A or B types to displace some C types of innovations. But if that were the case, we should expect to see that the frequencies with which teachers-and-others reported C-innovations in 1968, before the flurry of collaborative innovation, were about the same as in 1972, after the flurry -- and we should especially expect to see this pattern in Auburn, where the peak of B-innovations did not occur until 1970. It can be seen in both Tables 10-1 and 10-2, however, that the number of schools reporting C-innovations in first place was smallest in 1968 and rose over the four years to a maximum in 1972.

Still another alternate hypothesis would be that the climate of the times encouraged all types of innovation to increase, and the increase of C-innovations over these years was simply a part of a secular trend. If we look at the rates of reports of no innovations at all (type N), however, we see that the proportion of schools in Kent putting N in first place in 1968 was about the same as the proportion in 1972. In Auburn, the proportion went down in 1970 and 1972; we do not know whether it followed the trend in Kent to rise again in 1973.

These findings seem to us useful admonitions to the consultant.

The data described so far do not directly say that a school can use an unsuccessful experience with collaborative innovation upon which to build a successful curricular innovation -- we have no evidence on how successful these twelve schools were in their curricular innovations. However, we have two other sources of data that do support the interpretation that an unsuccessful effort at collaborative innovation can lead to successful curricular innovation.

The first source is a study conducted in a school district that was undertaking to install an adaptation of program planning and budgeting called SPECS (for a description of SPECS, see Nagle and Walker, 1975) developed at CASEA by Terry Eidell, Jack Nagle, Lloyd DuVall, and others. Dr. Harry Wolcott has reported to us informally that the SPECS system as a whole did not take hold, *but* that many teachers stated on questionnaires or in formal meetings that they found certain of the techniques valuable aids in curricular planning and intended to continue using them. In fact, many teachers came to speak of the project in its later stages as one of curricular revision and planning. This example seems to us a case of organizational (type A or B) innovation, with the more difficult type faltering but with the curricular part of it continuing.

As we write this, Wolcott's data have been augmented by a note from an application of SPECS in Twin Bridges, Montana. Sherrie Stewart (1974) writes:

> As a member of our district's task force, I have been actively involved with SPECS for the past five months. Over this time, the value of SPECS as a guide to better teaching has increasingly become more evident. Our district's initial involvement with SPECS was with the flowcharting that is part of Component One. As teachers communicated their desired outcomes to each other, they became aware of certain "holes" and "overlaps" in the curriculum.
>
> I look to SPECS to help our district in many ways. Through flowcharting we've already seen many benefits. When we become involved in Component Three, I hope to see improvement in lesson planning, improvement in recording of student data, and especially improvement in the building of a good curriculum guide.

Here again, we see a teacher seizing upon the curricular benefits of an innovative program that is structural in its fully developed form.

The second corroborating study was one done by Donald G. Murray (1973). He studied two schools, both of which undertook to adopt multiunit structure and attendant curricular changes. The study has been summarized in the book Consultation for Innovative Schools by Schmuck, Murray, Schwartz, Smith, and Runkel (1975); they described the outcomes in the two schools as follows (pp. 360-361):

> At Spartan, staff members became deeply immersed in the OD consultation during the initial year of the project. In contrast, the Palmer staff quickly was trying out a completely new technical [i.e., curricular] structure [simultaneously] with team teaching and individualized instruction.... It is relevant to note also that Spartan staff members experienced success with their problem-solving activities toward the end of the first year, while the Palmer staff did not; also, the multiunit structure itself -- with its special social-psychological attributes -- was discussed much more within the Spartan problem-solving groups than in the Palmer problem-solving groups. Premature attempts to unitize at Palmer decreased the teachers' feelings of efficacy; they frequently mentioned concerns about following through on commitments to colleagues and on not working closely enough with students ....
>
> The Palmer staff's rapid attempts to implement the unitized structure ..., combined with an absence of

formal procedures for managing cross-unit tensions, brought about high amounts of organizational stress. To complicate matters, Palmer staff members viewed early attempts by the OD consultants to work on interpersonal tensions as a waste of valuable time. After all, the Palmer staff members said, we have a job to do -- to establish instructional goals, to develop curriculum, and to agree on our instructional procedures -- why should we spend time on the discussion of norms, skills, and procedures? Rather than working so early on designing curriculum innovations, we now believe that the consultation during the initial year at Palmer should have emphasized the problems the staff was confronting with interpersonal collaboration and procedures. The frustrations at Palmer are examples of taking action toward innovative educational procedures before the staff has developed clear understandings and procedures for collaborative work.

In other words, early attempts at [curricular] consultation at Palmer did not provide the same benefits as later [curricular] consultation at Spartan. Our recommendation is that OD consultation should precede efforts to bring about [curricular] change. We see the optimum period of change as occurring over a two-year period. OD consultation would be emphasized during the first year, while revisions in curriculum, instruction, and evaluation would be emphasized during the second year.

These two studies provide cross-validation for the data from Kent. The cumulated evidence argues that a school contemplating curricular innovation will heighten its chances of success if it first gives staff members practice in new norms and skills for the collaboration that will be necessary to the innovation's success. Just how participation in structural or collaborative work helps a staff to get ready for curricular innovation is not yet clear. Perhaps some practice in making organizational adjustments, even when they are not wholly successful, can make a staff more confident that they know how to get off to a good start with a somewhat less stressful innovation. It is also possible that a project in organizational change heightens the awareness of staff about curricular changes they would like to make and about the steps available to set them in motion. Perhaps the discussions of curriculum that go on during efforts to make a structural or a collaborative innovation, whether or not the innovation is successful, lay the groundwork for later curricular changes. Or perhaps, the very process of dealing with a more difficult innovation creates new patterns of communication, increases the climate of cooperation and mutual responsibility, and these in turn are beneficial to a staff in implementing later innovations.

In summary, if a school has not tried difficult organizational change, it is treading a very risky path to do so without outside consultant help. If it has tried collaborative organizational change, then it may still be ready for curricular change even if it has failed in the effort toward collaboration.

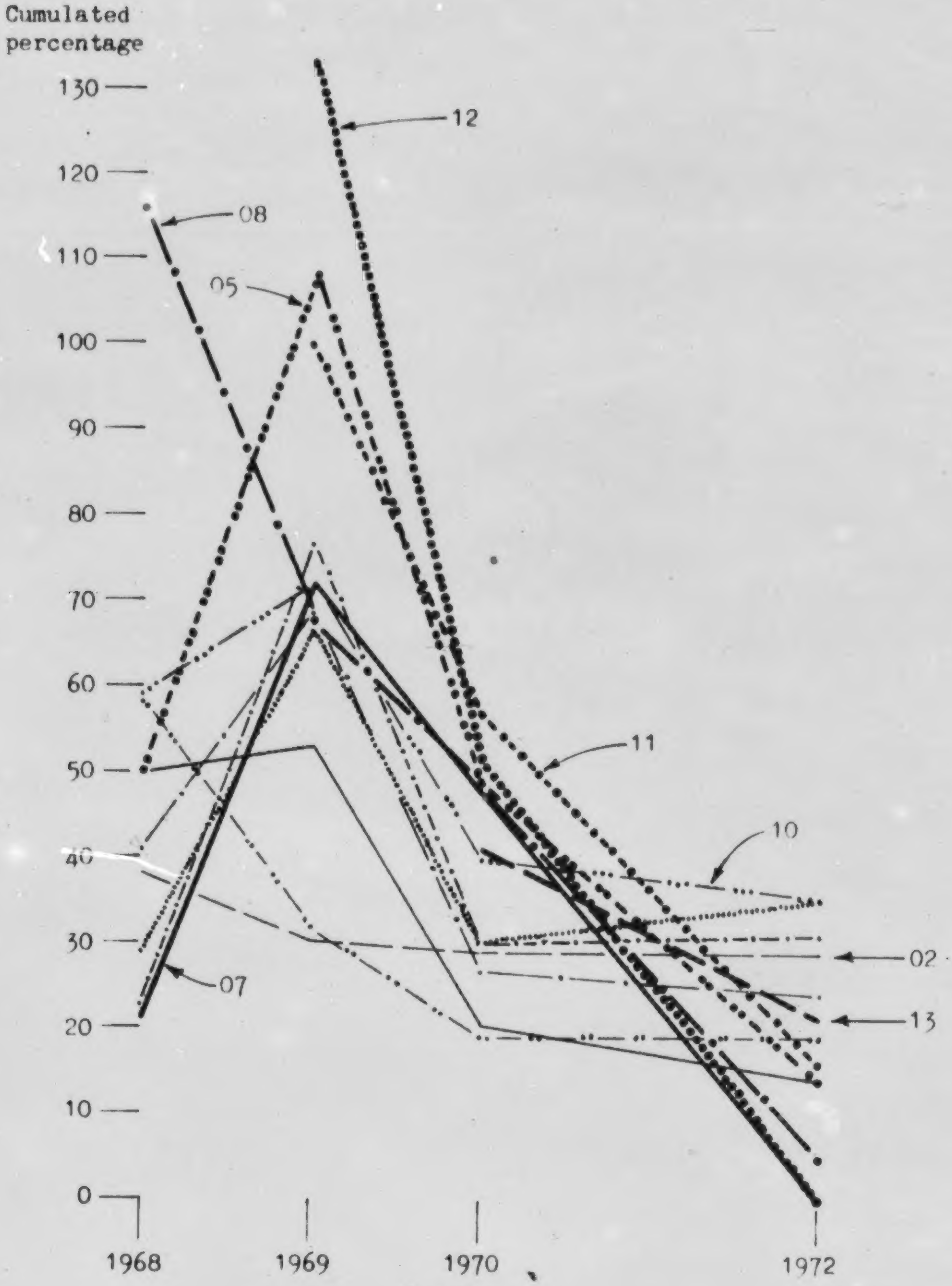
Percentage Levels

To complete our analysis of the relative salience of innovations among schools, let us examine the relations among schools that appear when we pay attention to the actual cumulated percentages of reports of the five types of innovations. Let us look first at the percentages given to type B -- collaborative innovation -- the type of innovation that was most salient in these districts in these years. Figure 10-1 charts the cumulated percentages for reports of B-innovations among the elementary schools of the Kent district. Schools K14 and K15 are not show in Figure 10-1, because they were administered questionnaires only at one time; the single point for each of these schools does not enable us to draw a trend.

Collaboration

The high peaks in the year 1969 in Figure 10-1 mirror the appearance of B-innovations in first place in Table 10-1. And just as the B-innovations vanished from first place position in Table 10-1 in 1972, so the curves in Figure 10-1 drop from a maximum of 133 in 1969 to a maximum of 35 in 1972, with some going to zero. (We explained in the section on "Categories of Innovation" how a cumulated percentage can rise above 100, and Appendix 10-A gives more detail on the matter. In short, it is simpler to think of the "cumulated percentage" merely as an arbitrary index of density of response, and forget that the index was derived from a series of percentages.)

Figure 10-1. Cumulated percentages of reports of innovations of type B in elementary schools in Kent



But beyond portraying graphically the great change in the salience of B-innovations in Kent between their peak in 1969 and our last assessment in 1972, Figure 10-1 shows another important pattern -- this time, not a difference between years, but a difference between clusters of schools. The pattern shows most clearly between 1970 and 1972, when some curves cut steeply downward across other curves that run more horizontally. We interpret this contrast -- the fast rate at which some schools gave up mentioning B-innovations contrasted with the seeming "reluctance" of others to say the B-innovations were no longer there -- to reflect the two different ways that the schools dealt with their B-innovations. That is, some schools (represented by the downward-sweeping curves) dealt with their collaborative innovations with directness and dispatch, either to decide to reject them firmly or to marshal all energies and bring them quickly into full operation.* In other schools (represented by the curves having lower peaks and the longer horizontal tails), the collaborative innovation had impact on a smaller proportion of the faculty at the peak, and was still being considered "new and possibly useful" even three years later by about a third of the staff.

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* The steep curves can represent either of two phenomena -- either schools quickly rejected collaborative innovations or so quickly and successfully implemented them that they were no longer being mentioned as "something new" at later administrations of the questionnaire. School K12, as we mentioned in Chapter 7, is an example of a school exhibiting a steep curve that had successfully implemented collaborative innovations --as we know from its extremely high B-score.

It is important to remember when comparing this chapter to Chapter 7 that the measures of innovations used in the two chapters, although similar, are not identical.

Our intent in conducting organizational training has always been to heighten the self-renewing capacity of a school or district. In reference to innovations, this does not mean that our training should cause the school to take on more innovations per year than an untrained school. Nor does it mean that the trained school will necessarily carry out faithfully more of the innovations that are brought to them by the central office or other outsiders. What it means is that the trained school will, we hope, make up its collective mind, so to speak, with greater dispatch. If the members of the school collectively commit themselves to an innovation, the school trained for self-renewal will then marshal more of its energy and other resources than will an untrained school, and it will apply them in more effective ways. If the members decide the innovation is not suitable for them, they will extricate themselves from it decisively and go on to other work. In either case, the cycle of investigating, evaluating, deciding, and acting should be shorter in the trained school than the untrained and should exhibit more focused application of energy during that cycle.

Return now to Figure 10-1. The feature of interest is the continuing swift drop of some of these curves, crossing others that level out, more or less, between 1970 and 1972. There are six curves that descend swiftly between 1970 and 1972, crossing others as they do so; of these, four represent schools that had received some amount of training. During the same period, there are seven curves that are crossed by the steeper ones;

of these seven schools, only one received training -- school K02. School K02 did not receive training until August of 1970, received only 14 hours then and received no more by our last assessment in 1972. In contrast to the other trained schools, school K02 received no training during the period of the "big push" toward collaborative innovation in Kent -- and note how low its curve remains across all years in Figure 10-1. Then, in the summer of 1970, it received an amount of training that we showed in Chapter 6 often does more harm than good, and we took our next assessment of it a long time later -- one-and-a-half years later. Considering these factors, it is not easy to decide to call school K02 a "trained" school in the sense that its training could reasonably have been expected to have an influence on the slope of its curve in Figure 10-1. The reader will have to make his or her own choice. We prefer to call school K02 more untrained than trained for the purposes of Figure 10-1.

Table 10-4 gives the identification numbers of the thirteen schools of Figure 10-1 categorized by (1) having been trained or not and (2) having curves for mentions of B-innovations in Figure 10-1 that cross downward or are crossed. In Table 10-4, we have classified school K02 as untrained for the reasons we gave above. Tabulating the schools in this way, the distribution in Table 10-4 is statistically significant at the .03 level by Finney's (1948) exact tables. If school K02 were to be classified in Table 10-4 as trained, the distribution would miss statistical significance at the .05 level. Remember that those schools "crossing downward" are those that most expeditiously deal with innovations.

Table 10-4. Trained and untrained elementary schools cross-classified by whether they gave up reporting collaborative innovations rapidly (crossing downward in Figure 10-1) or more slowly (being crossed in Figure 10-1)

	Slope		
	Crossing downward	Being crossed	No. of schools
Trained	K05 K11 K12 K13		4
Not trained	K07 K08	K01 K02* K03 K04 K06 K09 K10	9
No. of schools	6	7	13

* The reasons school K02 is classified here as "not trained" are explained in the text.

The evidence in Table 10-4 seems to fit the hypothesis of an accelerated cycle -- whether a cycle of rejection or adoption -- among the trained schools in comparison with the untrained.* Now let us recall the schools that succeeded in their collaborative innovations according to the new criterion used in this chapter. According to our new criterion, the successful schools in Kent in 1972 were K05, K11, and K12. Using the B-score (explained earlier) as evidence of the actual presence of a B-innovation in the spring of 1972, we can now say with some confidence that schools K05, K11, and K12 were actively maintaining team teaching and supportive organizational arrangements in 1972, with school K12 showing the most evidence of doing so (its B-score was 3). School K13, newly established in 1969-70, was showing no significant evidence (a B-score of zero) of school-wide collaboration in 1972. This school, among those with the steeper slopes in Figure 10-1, had the least steep slope (extricated itself most slowly), and its percentage of staff still reporting team teaching in 1972 was higher than the percentages in two of the seven schools showing the lesser slopes. The outcome for this school somewhat weakens the interpretation. School K02, among the five trained schools, clearly fell in the "being crossed" category. Its B-score was zero. Its late and meager training apparently gave this school little or no aid in relinquishing clearly and consensually its B-innovations. Of the five trained schools in Table 10-4, school K02 had the shortest history of training and the median number of hours of training. Among the five trained schools, in brief, the evidence is fairly strong that the OD training helped schools to deal with innovations of the team-teaching type more expeditiously than the majority of the schools did. Let us now turn to the untrained schools.

---

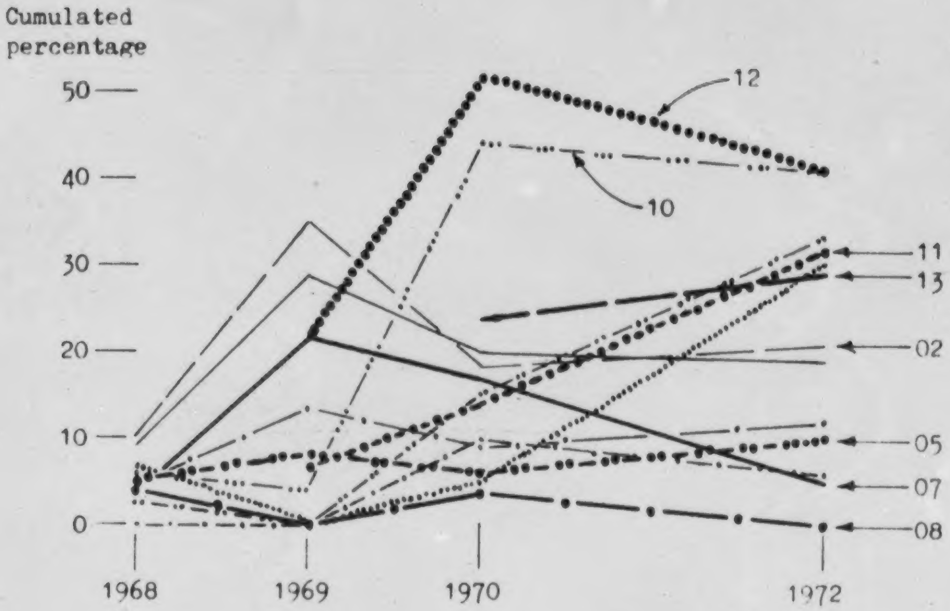
* An alternate hypothesis is that the ability to deal expeditiously with innovations was greater in new schools than in old. The expeditious or "crossing" schools that were new at the time their reports of B-innovations began dropping were K11, K12, and K13. The "crossing" schools that were old were K05, K07, and K08. The "crossed" schools that were old were K01, K02, K03, K04, K06, K09, and K10. There were no schools among the "crossed" that were new in 1969 or 1970. This distribution leans in the direction of the alternate hypothesis, though it is not statistically significant by Finney's exact tables. Clearly, newness was confounded with being trained, as we have pointed out before. Note the placement of the successfully collaborative schools, as explained in the text.

Despite the fact that Wyant's search for evidence of team teaching among the untrained schools failed to find any that exhibited even weekly meetings of teams, nevertheless six out of eight of them maintained fairly constant percentages (ranging between 14 and 35) from 1970 to 1972 of reports of the presence of team teaching or similar practices. To us, this strongly suggests that whatever collaboration was still going on in the school was involving only a small portion of the staff, or that communication was sufficiently confused in most of these schools that a sixth to a third of the staff still believed an innovative effort was being made, despite our evidence that no school-wide effort was indeed still under way.

All in all, we interpret this evidence to mean that OD training gave an important amount of help to some of these schools in dealing effectively with an environmental press to adopt team teaching and similar collaborative innovations -- either to adopt the innovation with vigor or to reject it with dispatch, while most of the untrained schools did not quite do either. Finally, we note that the one school in Auburn that received training during the period of this study -- school A11 -- was the school that received the highest B-score in that district in 1972 (for B-scores, see the previous section entitled Criterion for School-wide Collaboration).

Structure. Figure 10-2 charts the cumulate percentages for reports of A-innovation (structural) among the elementary schools of the Kent district. The notable thing about Figure 10-2 is the sharp rise in the percentages of A-innovations mentioned by members of schools K10 (an untrained school) and K12 (a trained school), along with the fact that those percentages declined only a little between 1970 and 1972. Again, the school that had received the greatest amount of OD training -- K12 -- stands out as unusual. In Figure 10-2, the percentages in school K12 mentioning structural changes soar far beyond the other schools in 1970, and tied for highest (with school K10) in 1972. Aside from the performance of school K12, however, the other trained schools do not stand out from the crowd in the percentages of their reports of A-innovations. As can be seen from a scrutiny of Figure 10-2 or by reference to Appendix 10-B, the other trained schools, both in 1970 and 1972, were scattered rather evenly throughout the range of the untrained schools. This outcome supports our hypothesis, mentioned earlier, that A-innovations are more difficult to achieve than B-innovations; it appears that although training does seem to help schools with B-innovations, most schools would need more training than these schools had to affect their accomplishment of A-innovations.

Figure 10-2. Cumulated percentages of reports of innovations of type A (for which see text) in elementary schools in Kent



The fact that the highest cumulated percentages of A-innovations were only 41 percent in 1972 needs some attention. Perhaps the presumed innovations were trivial and only a few persons paid any attention to them. Or perhaps they were to some extent cloistered. Here are some actual responses, selected to span the range of kinds of responses obtained, from 1972 in school K12 in Kent:

> Teachers working in more than one vista [area of relatively open space used by a team of teachers] facilitates communication between areas.
>
> [Teachers and students in the] vista work as a [unified] third-and-fourth-team rather than a [separate] third-team and a [separate] fourth-team: [there are also] inter-vista visitations by staff.
>
> Monthly meetings of Superintendent's Communication Seminar.
>
> Availability of district Communication Consultants team when we want them.
>
> New superintendent and several new school board members.
>
> Phasing of special education pupils into regular classes.

Most of these items (not including the one about the new superintendent) call for coordination across subsystems and are not easy to make work successfully. Then too, the items concerning the school itself depend for proper functioning on having successfully established the team (vista) teaching mode. At the same time, most of the items describe activities that some staff members could know about and participate in without others having to know also. We conclude that the level of 41 percent, in this case, is a fair indicator that some structurally new things were actually going on in and around the school. Appendix 10-C contains additional selected answers from other schools and other years.

The position of school K10 in Figure 10-2 is a surprise. This school received no training, and yet was in the same company with the most-trained school in the percentages of reports it gave to the presumably most difficult kind of innovation. It is probable that school K10 was not stretching itself as far as school K12 in working at B-innovations; the position of school K10 in Figure 10-1 (B-innovations) is in the middle. On the other hand, by 1972 school K10 was very possibly putting more energy into innovation of several sorts than K12 was; school K12's highest percentage was the 41 percent it gave to A-innovations, but school K10 went on to give 71 percent to C-innovations as well. Perhaps the cycle of innovative surge came later for school K10, and it was going into the region of curricular change instead of team teaching. These speculations do not go very far to explain K10's high showing on reports of A-innovations, but we have no other relevant information about the school.

Results II: Distinctiveness of Schools

So far, we have been examining schools in reference to one kind of innovation at a time. It is also possible to compare schools on the basis of the correlations between their rank-orders of percentages over all innovations. When the correlations among pairs of schools are calculated, it is then possible to use the non-metric multidimensional scaling technique described in Chapter 5 to arrange points representing schools in a geometric space, with the points placed at distances from one another that represent the similarities among schools. That is, we shall use the percentages of reports of the five types of innovation to characterize the amount of attention each school was giving to the five types of innovation. By calculating the correlations between the percentages of reports that two schools give to the innovations, we obtain a measure of the similarity between the two schools in the way they react to the innovations: the higher the correlation, the more similar are the two schools in the way they dealt with the innovations. To represent all these similarities on paper, we can translate the correlations into distances. We shall want a small distance on the paper to represent similarity and a large distance to represent dissimilarity; therefore, we shall map higher correlations into smaller distances and lower correlations into larger distances. To calculate the correlations, determine the corresponding distances, and plot points representing schools on paper with the appropriate relative distances among them, we shall use the same computer program we described in Chapter 5* and used again in Chapter 8; namely, the Guttman-Lingoes MINISSA-I(M). Through the use of the nonmetric multidimensional scaling method, we shall be able to see at a glance, in a diagram, the relative similarities among the schools in their reactions to types of innovations. Further, we shall be able to see whether some schools "stand out from the crowd" in the ordering they gave to their reports of innovations; it is possible, that is, that one or more schools might achieve some distinctiveness in their ordering of their innovations.

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* See Chapter 5 for the technical description of this computer program.

Figures 10-3 and 10-4 illustrate the solution given by the MINISSA computer program for our multidimensional network of distances derived from the intercorrelations among schools. Figure 10-3 plots all thirteen elementary schools that existed in Kent by 1970. The figure shows the positions of the schools both in 1969 and 1970. A numeral without a circle around it shows the relative position of the school in 1969; a numeral in a circle shows the position of the school in 1970. The "tail" attached to a numberal in a circle points back to the position of the school in the earlier year. For example, the unencircled "02" shows that school K02 was very distinctive in 1969; it lay well outside the general cloud of positions of the rest of the schools. The encircled "02" shows that by 1970, this school had moved closer to the rest of the central cloud of schools, though it was still on the periphery.

A square around a numeral in Figure 10-3 indicates a school that had received training or consultation before the corresponding year. The square around "05" in Figure 10-3, for example, indicates that school K05 had received training before the questionnaire administration of 1969.

The large thin letters in the diagram indicate the types of innovation ranked first and second (the third through fifth ranks are omitted for simplicity) by the schools in the region of the letters. For example, schools K10 and K12 in 1970 both ranked A-innovations first and B-innovations second. Most of the unencircled numerals (1969) in the diagram lie closest to the BC and BN regions and the encircled numerals (1970) lie closer to the regions beginning with C and N; this arrangement shows graphically the same information we found earlier in Table 10-1.

Figure 10-3. Relative similarities among elementary schools in Kent in 1969 and 1970 in their ordering of mentions of innovations: the projection upon dimensions 1 and 3 of the MINISSA solution

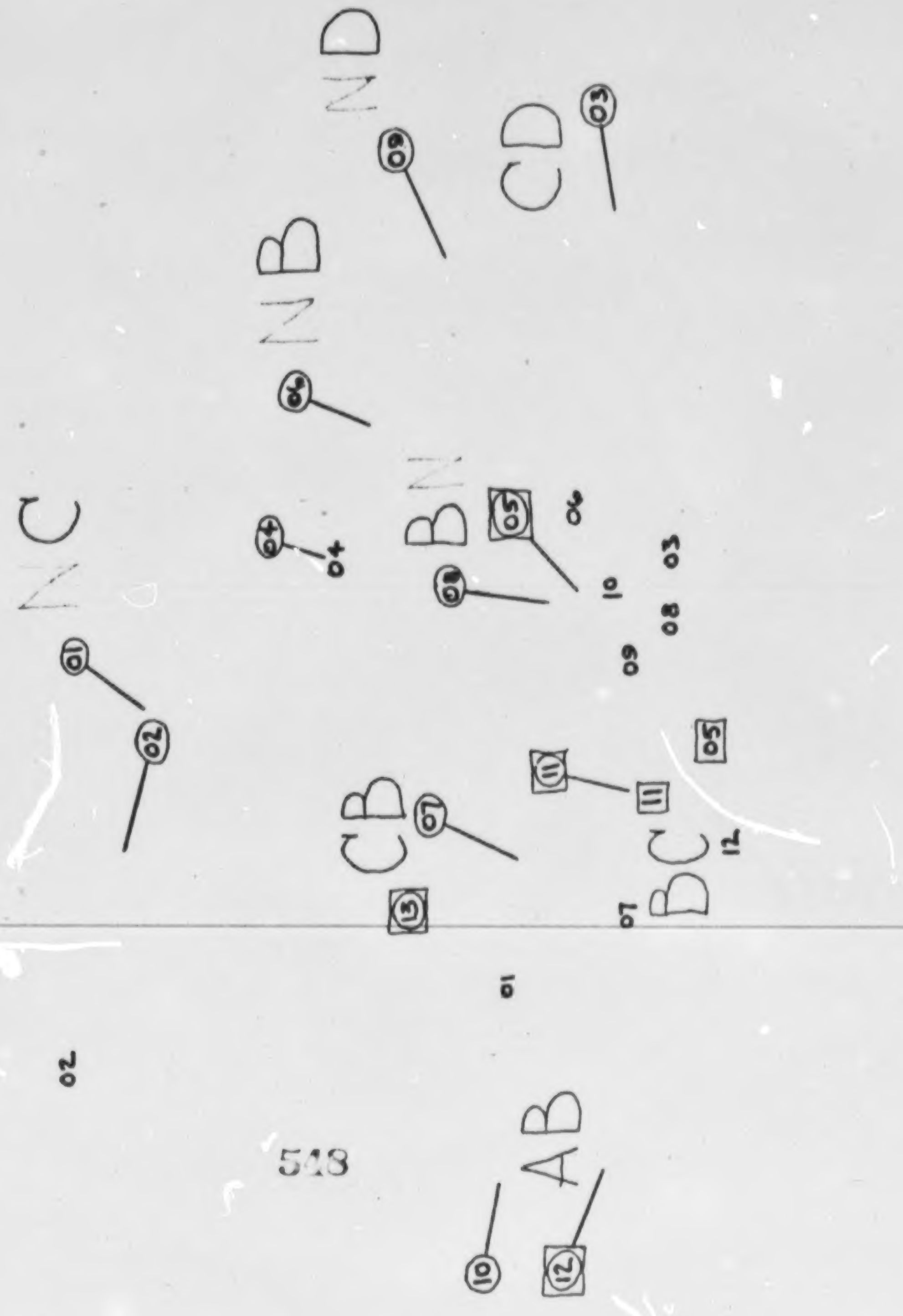
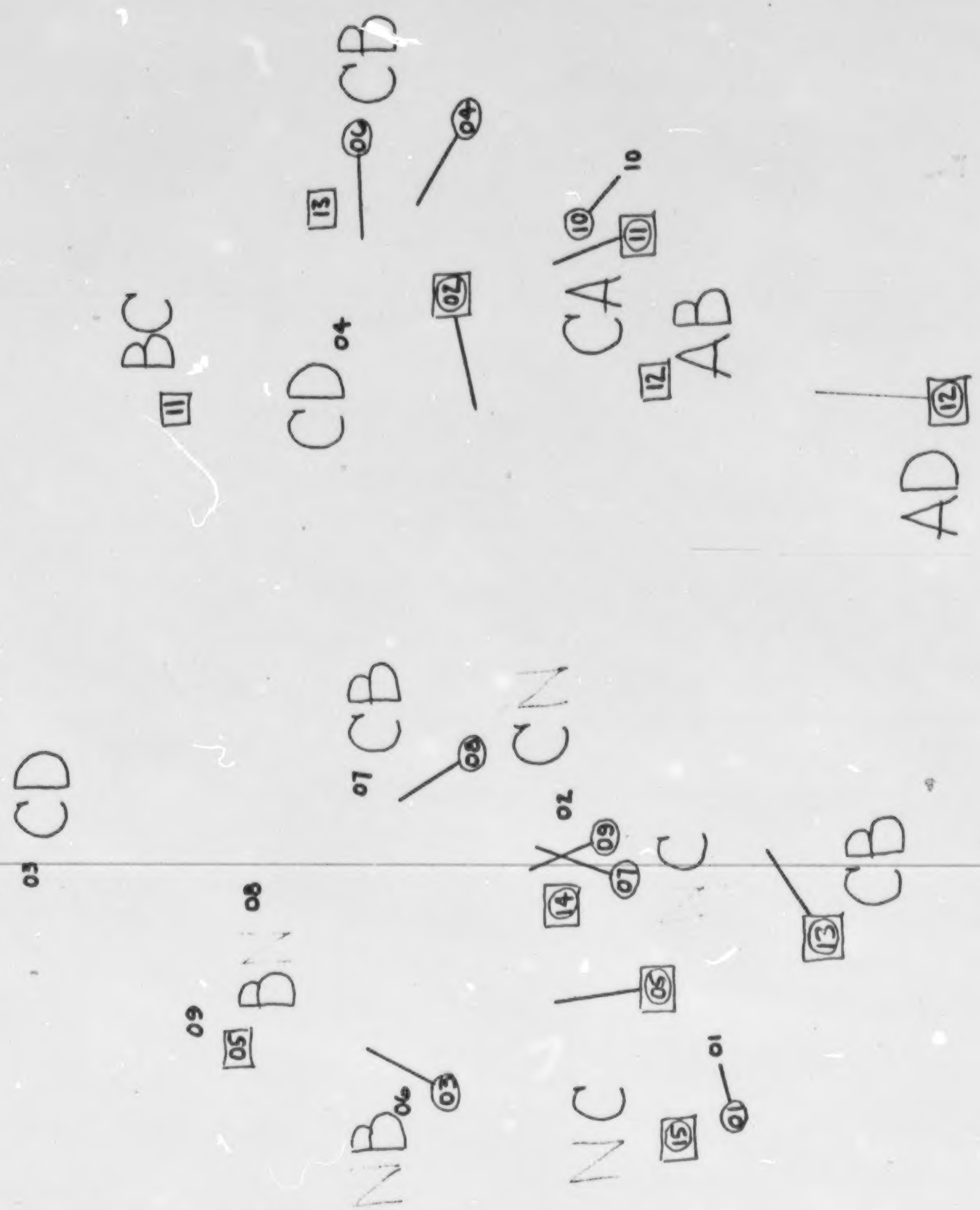


Figure 10-4. Relative similarities among elementary schools in Kent in 1970 and 1972 in their ordering of mentions of innovations: the projection upon dimensions 1 and 3 of the MINISSA solution



The MINISSA program produced nine plots like those of Figures 10-3 and 10-4. There were three plots for each of three pairs of years. There were three plots for each pair of years because the MINISSA found it necessary to use three dimensions* for an adequate solution, and it made a separate plot for each pair of those dimensions. Each plot, of course, shows the projection of the school-points on those two dimensions. The plot shows the way the points would look if you were looking at them through one pane of a glass box. We have chosen only two of the nine plots to exhibit in this chapter, because they illustrate very well the trends to be seen in all of them.

In Figure 10-3, three schools have distinctive positions; that is, the percentages of mentions they gave to the five innovations were very different in order and proportional magnitude from those given by the other schools. School K02 was distinctive in 1969, and schools K10 and K12 were distinctive in 1970.

In connection with Tables 10-1 and 10-2, we pointed to the frequent shifting shown by schools in the innovations to which they were giving

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* With the plan used, all solutions ran only to three dimensions and 25 iterations. The coefficients of alienation and the figures for Kruskal's stress are:

Plot	Coef. of alienation	Kruskal's stress	Statistical significance by Spence and Ogilvie (1973)
1968-69	.022	.017	Significant
1969-70	.037	.031	Significant
1970-72	.071	.063	Significant

most attention. The MINISSA plots show this movement graphically. We have already mentioned, for example, how Figure 10-3 shows schools moving from B and N regions in 1969 to C, N, and A regions in 1970.

In visualizing the movement of schools among regions (different orderings of innovation-mentions), a useful analogy is a cloud of gnats.* Any single gnat may change its position in the cloud in a greater or lesser amount, but the cloud as a whole remains a complete entity. At any one inspection, we may find some gnats in the A-region or structural kind of innovation. Others would be found in the B-region, and so on. Between inspections, we might find that the cloud as a whole had shifted so that we find more schools than formerly in the B-region, or in the N-region, or some other.

Vacillation within the cloud from year to year is the normal thing. A teacher might show up who pursues behavior modification, a new biology curriculum might be adopted, schedules might begin to be worked out by a computer downtown, and so on. Any of these events, whether the "adoption" turned out "successful" or not, would affect the percentage of staff giving answers of a particular sort when responding to our question. Different kinds of things are usually "new" in different years. In our cloud analogy, this would mean that sometimes a school moves toward the outside of the cloud (where its maximum distance from its fellows corresponds to its being strongly dissimilar from them) and sometimes it moves toward the center of the cloud (where it is maximally like its fellows). A school that does this shifting, in, out, and around, is doing the usual thing. The remarkable school is the one that stays in one place -- either in the sense (1) of staying near the outside in contrast to the center, or vice-versa, or (2) staying in one specific sector (whether toward the outside or center) in contrast to other sectors. We in CASEA's program on Strategies of Organizational Change, of course, are especially interested in any school that can take a departure from the ordinary way of doing things in its district and maintain that departure against the norms of the district as a whole. We believe that it is especially difficult for a school to undertake a manner of operating that is different from the majority, and even more difficult to maintain it.

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* Readers who have spent their lives in cities may never have seen a cloud of gnats, a swarm of bees, or the like. They might use the analogy of a flock of pigeons hovering off the ledge of a building or a cloud of flies around a garbage can.

We saw in Figure 10-3 that three schools (K02, K10, K12) lay outside the "cloud of gnats." What will happen to these schools in a later year? Will they retain their distinctiveness? Let us look now at Figure 10-4.

Figure 10-4 shows the plot of school-points for the years 1970 and 1972. (The symbols here have the same meanings as in Figure 10-3, except that the earlier year shown by the unencircled numerals is 1970 and the later year shown by the encircled numerals is 1972.) Looking for the 1972 positions of schools K02 and K10, we find both of them well within the right-hand cluster; K10 has lost the distinctiveness it had in 1970, and K02 has lost the distinctiveness it had in 1969 -- in fact, K02 lost its distinctiveness by 1970, as we can see from its unencircled position in the left-hand cluster in the figure.

School K12, in contrast, has remained well outside the general cloud in 1972; it remains more distinctive than any other school. Moreover, it has remained firmly within region A.* School K12 is the only school that retained the top position in distinctiveness over two consecutive assessments (1970-72).

There is a simpler way to compare the distinctiveness among schools. Instead of looking at the diagrams and trying to imagine how they might look in three-dimensional space, we can use a numerical index of distinctiveness. The MINISSA program computes an index that is just what we are looking for. MINISSA computes this distinctiveness* index for each point in the plot.

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* A warning here about reading the diagrams may be helpful. In Figure 10-3, it was easy to see that school K12 lay apart from the cloud in 1970. In looking for the 1970 position of K12 in Figure 10-4, it seems not in a distinctive position. But remember that there is always a third dimension in these diagrams that has been collapsed onto the paper. If we were to look at another of the three plots for 1970-72, one of them would show K12 hanging well outside the plot in 1970, but its position for 1972 would be completely obscured. Unfortunately, there is no single two-dimensional diagram that shows K12's true distinctiveness in both years. It will also be helpful to remember that the positions for 1970 in the 1969-70 plot do not have exactly the same configuration they have in the 1970-72 plot because the computer has a different set of distances to adjust and because it will choose the directions of the dimensions differently.

* Actually, the MINISSA itself calls this index a "centrality" index, but it is equally easy to look at it from the complementary point of view and call it a distinctiveness index.

When the index is high in numerical value, the sum of the distances from the point to all other points is large; that is, the point is maximally dissimilar from all other points and the point is distinctive in relation to the cloud.

A high index of distinctiveness, in our application of it, does not indicate a school that is engaged in more innovations than other schools, or even more of the kind to which it gives the highest percentage of reports. Rather, a high distinctiveness index means primarily that the rank order the school has given reports of the kinds of innovation is very different from the rank order of the other schools.

Table 10-5 shows the indices of distinctiveness of each school in the Kent district and the ranks of the indices within each year. As we expected, few schools stayed very high or very low in their distinctiveness ranking. Only one school that reached first rank reached it a second time; school K12 reached first place in 1970 and was found there again in 1972. School K12 is the school that so often stood out from the rest in earlier pages and chapters; it is also the school that received the most frequent OD training and the greatest cumulated number of hours of training.

Table 10-5 Indices and ranks on distinctiveness of elementary schools in Kent in rank-ordering five kinds of innovation

School number	1968		1969		1970		1972	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
K01	76	7	72	3	91	4	88	6
K02	96	3	166	1	46	12	77	9*
K03	89	4	68	5	85	5	97	4
K04	60	9	149	2	80	6	111	3
K05	89	5	42	10*	56	10	56	12*
K06	79	6	68	4	70	7	116	2
K07	97	2	41	11	45	13	44	15
K08	130	1	49	9	57	9	59	11
K09	67	8	62	6	92	3	49	14
K10	52	10	58	7	109	2	85	7
K11	none		29	12*	49	11	78	8*
K12	none		55	8	121	1*	119	1*
K13	none		none		63	8*	69	10*
K14	none		none		none		50	13*
K15	none		none		none		91	5*

* This school received OD training between this assessment and the previous assessment (if any previous assessment was made).

We sometimes hear that a newly-established school has a better chance to do something new and different than an older school. However that may be elsewhere, the new schools in Kent in these years did not do things that were different from what the old schools were doing. It is true that the new schools were often very active with innovation, but they were generally active with the same kinds of innovations being undertaken in the older schools. Giving training or consultation in OD to new schools just before they opened did not change this pattern. The reader may wish to inspect Table 10-5 for the evidence behind these statements. The only exception to the statement about the lack of effect of training is found in the case of (you guessed it!) school K12. After school K12's first training in August of 1969, its index of distinctiveness moved to the top of the list and stayed there because of the proportion of attention it gave to structural innovations.

We should take space to say that we see nothing to boast about in sheer, unqualified distinctiveness. A thing that makes one school distinctive may not be a desirable thing for other schools -- or even for the one school The desirable thing is for the school to be able to marshal sufficient energy and emotion to assure steady progress toward a consensual goal, and to do this with a minimum of aborted plans, misunderstandings, paralyzing fears, and similar wheel-spinning. Of course, while any of the five classes of innovations can be good for a school in one way or another (including a period of no innovations at all), the types that we usually try to make more easily attainable through OD training are especially those that are socially complex -- types A and B.

Let us now turn to a graphic display of the distinctiveness indices listed in Table 10-5. In Figure 10-5, each of the four dark horizontal lines represents the range of distinctiveness indices for one year.*

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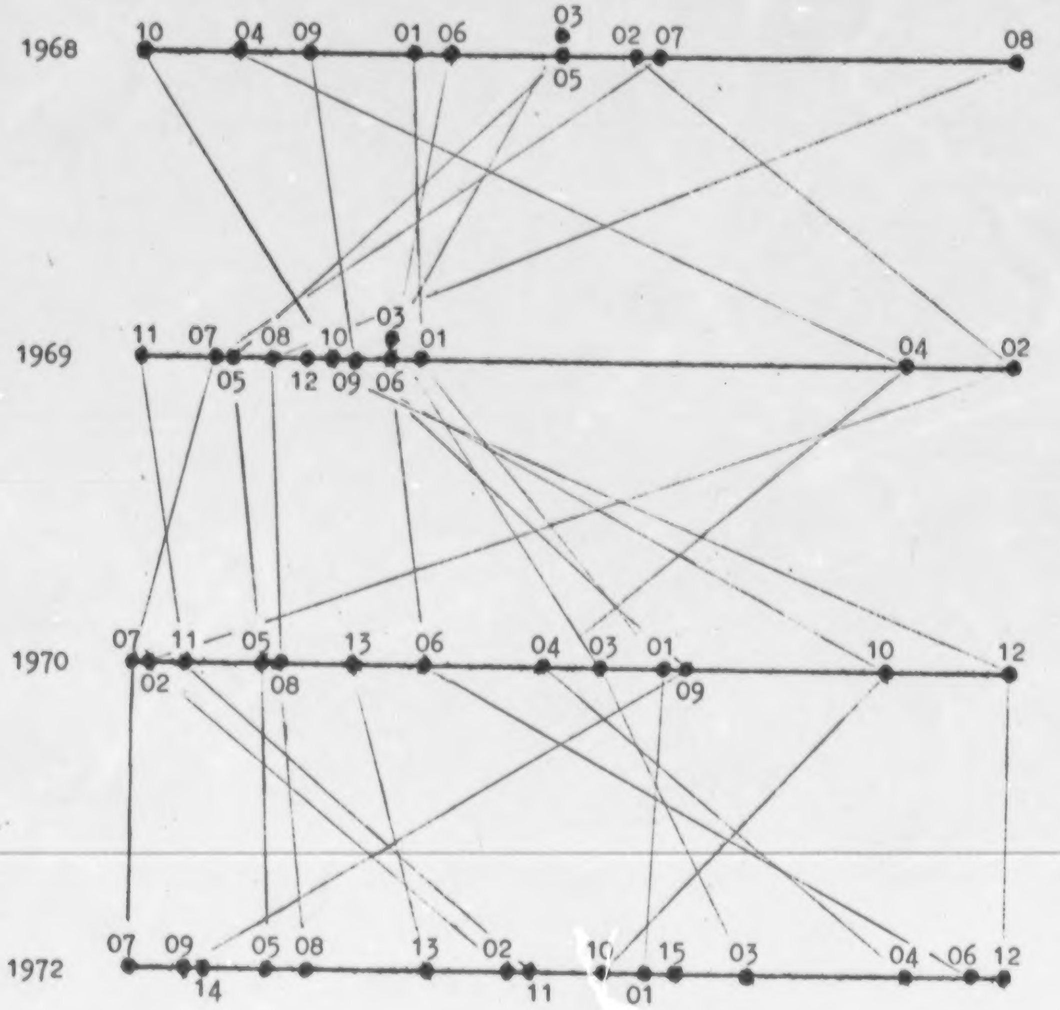
* The ranges (they can also be ascertained from Table 10-5) ran from 52 to 130 in 1968, 29 to 166 in 1969, 45 to 121 in 1970, and 44 to 119 in 1972.

Figure 10-5. Comparative distinctiveness of elementary schools in Kent in reporting five kinds of innovation

Numbered dots represent positions of schools along the distinctiveness scale. On the scale for each year, the school at the left is most central or typical in its ordering of attention to types of innovation as indicated by reports of staff. The school at the right is most distinctive.


1968
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1970
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01
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10
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1972
07
09
14
05
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02
11
10
01
15
03
04
06
12

The scales in Figure 10-5 have been adjusted so that the range for every year occupies the same number of inches on the paper. A dot at the left end of a scale represents the school that was buried most deeply in the "cloud of gnats"; this school was most central or typical in its ordering of attention to types of innovation, as indicated by the reports of its staff. The dot at the right-hand end of the scale represents the school that was most distinctive in its ordering of innovations; this was the school that stood out most from the crowd.

The zig-zag lines in Figure 10-5 are there to aid the eye in tracing the movement of schools in the "cloud of gnats" as the years went by. It is easy to see in the figure that few gnats hovered very long in one place. Schools K05, K07, and K08, it is true, maintained relatively central positions from 1969 to 1972, and school K06 remained about half-way out from the center from 1968 to 1970.* The more typical behavior of a school was to shift back and forth from year to year. The shifting was especially marked on the part of those schools that were especially distinctive at one time or another. Looking at the right-hand end of the scales, we see instances of schools that flew out to the periphery of the cloud and then quickly fluttered back toward the center; namely, schools K02, K04, and K10.

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* But we should also remember that the cloud as a whole was shifting from year to year. In 1968, the cloud hovered mainly in the regions of B-innovations and of lack of innovation (N). In 1969, it moved more deeply into the B-region. In 1970, it shifted toward C-innovations. In 1972, it lay largely in C-innovations and in absence of innovation (N).

Presumably, school K08 was behaving this way in 1968 and schools K04 and K06 in 1972, though we are only guessing at their behavior before 1968 and after 1972. The exception to all this shifting about was K12. Beginning with an engagement in innovative activity that was typical for the district in 1969, it soared to the position of greatest distinctiveness in 1970 and maintained that position through 1972.

The movements of the trained schools in Figure 10-5 give little evidence that training and consultation had much to do with achieving distinctiveness in the relative amounts of attention the five types of innovation were getting. School K05, for example, went to the center of the cloud and stayed there. School K11, after receiving training and consultation during the 1968-69 school year, appeared at the center of the cloud at the 1969 questionnaire administration and was still there in 1970. After training in the summer of 1970, school K11 moved half-way toward the periphery in 1972. Although the movement of school K11 was hopeful, it was not impressive. On the other hand, school K12 gave the stellar performance; it moved to first place in distinctiveness and stayed there through 1972.

We should remember that distinctiveness is not the same thing as innovativeness. For example, school K07 was second in distinctiveness in 1968 because of the fact that the greatest percentage of responses from the school indicated no awareness of any innovation going on. In 1969, eleven of the twelve elementary schools were undertaking collaborative or structural innovation to one degree or another; therefore a school in that year would be distinctive if it tried some other type of innovation or no innovation at all. On the other hand, a school can be innovative without being distinctive; schools K05 and K11, which we mentioned in the paragraph just above as showing low distinctiveness, were two of the three that passed our criterion for success in collaboration. School K12, of course, not only passed our criterion for collaboration, but did so in a very distinctive pattern of innovation. Though its high distinctiveness does not necessarily indicate innovativeness, K12's score confirms our findings in study after study -- that K12 stood out from the crowd of all other schools.

In summary, the patterns of attention to different sorts of innovation among Kent elementary schools shifted constantly over the four years of assessment. The schools as a group shifted their primary attention among the several types of innovation, and within the group movement, individual schools were even more changeable. The one school that stood out in maintaining a very distinctive pattern of innovation over two assessments was school K12, the school that received the largest amount of training and consultation.

Table 10-6 shows the distinctiveness indices and ranks in Auburn. The schools in Auburn showed the same normal meandering as those in Kent. School A01 showed the most distinctive pattern. It appeared in first place in distinctiveness in 1968 and in second place in 1969. This achievement seems at first glance very close to that of school K12 in Kent, and we will not discount A01's performance merely because of its drop to sixth place in 1970, because school K12 may also have lost its first place after we stopped administering questionnaires. Nevertheless, school A01 in Auburn did not reach the difficult regions of structural innovation reached by school K12 (see Table 10-2).

Table 10-6. Indices and ranks on distinctiveness of elementary schools in Auburn in reporting five kinds of innovation

School number	1968		1969		1970		1972	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
A01	118	1	112	2	67	6	none	
A02	104	3	77	7	134	1	63	6
A03	none		135	1	none		none	
A04	94	5	85	5	54	9	101	3
A05	99	4	100	3	74	5	none	
A06	37	7	80	6	112	2	54	8
A07	71	6	61	9	61	7	66	5
A08	none		73	8	95	3	79	4
A09	114	2	94	4	59	8	none	
A10	none		none		88	4	135	1
A11	none		none		none		105	2*
A12	none		none		none		62	7

* This school received OD training mostly in August of 1970

Summary

We review here the chief conclusions that we think our data support. The evidential support is not always as strong as we would like for a particular conclusion. In the "Discussion" section following this summary however, we shall describe how the findings of this chapter fit together with others and thus produce a strong overall pattern of results.

First, innovations like achieving structural-organizational changes and bringing about a great deal of collaboration among classroom teachers are more difficult than most curricular changes or "cloistered" changes such as computer scheduling, using audio-visual aids, and the like, and these are more difficult than making no changes at all.

Second, schools usually meander from one innovation to another (including periods with no innovation at all) in cycles of one or two years. Only one school in one district, the one that had received the most hours of training in organizational development, reported in two successive questionnaire-administrations two years apart that it was primarily engaged in the more difficult structural-organizational changes.

Third, if a school had unsuccessfully tried a collaborative innovation, it was very unlikely to try a complex structural innovation and not very likely to continue effort toward the collaborative innovation. It was likely, however, to turn to curricular innovation.

Fourth, training in organizational development gave an important amount of help to some schools in dealing relatively expeditiously with the environmental press to adopt team teaching and similar innovations. It did, however, fail to help one trained school. Among untrained schools, the responses of six out of eight indicated either that innovative activity was minor and isolated or that communication in these schools was so poor that a sixth to a third of the staff believed that innovations were in progress that actually weren't.

Fifth, being a new school rather than an old school did not significantly accelerate the process of adopting or rejecting innovations of the team teaching sort. Nor was being a new school connected with reporting distinctive patterns of priority among the types of innovations studied here.

The signal performance was that of school K12 in the Kent district. This school began life at half its intended size in 1968-69, as a "guest" of another school in an older building. It began its full-scale operation in the fall of 1969, and received its first OD training that August. It received training again in December 1969, August 1970, and January 1972; the total was 46 hours, the largest amount of training given any of the schools included in this study. This school gave more attention to team teaching and similar new collaborations in the classroom than any other school did (as indicated by the percentages of reports of these innovations) and gave up reporting them at a greater rate than any other (see Figure 10-1). Since independent evidence from later interviews by Wyant indicates that the school did succeed in making team teaching and the "open concept" work, the steep drop in reports of this sort of innovation surely means that the thing that was new in 1969 had become routine by 1972. The reports from the school in 1972 indicated that the concerns of the school for new ways of doing things had moved on to structural matters -- such as new collaborations between teams, continued use of the cadre of organizational specialists, reorganizing "special education pupils" into regular classes, and new relations with the central office.

We do not conclude from these data that the amount of training received even by the longest-trained school in this study is likely to be sufficient to give most schools the constructive adaptability we envision as "the capacity for self-renewal." We know from other data that school K12 in Kent began with a number of factors in its favor (some of these were mentioned in Chapter 2). In fact, we have been surprised, while analyzing the data, that the training had as much effect as it did on the other trained schools in this study. In any case, the benefits in school K12 and one or two others in the Kent district surely reward several times over the meager hours they spent in OD training. If an innovation being attempted is indeed worth incorporating, or if a confident, vigorous, mutually-trusting faculty is worth having, or both, then OD training in some minimal number of hours is surely one of the more fruitful ways a school can invest its time, energy, and money. Even if the hours of training were doubled or tripled over the 46 hours given school K12, the amount would still be a small fraction of what most schools invest every year in college courses and in-service training, large parts of which pay dividends of dubious value.

Discussion

The findings of this chapter seem to us to fit very well with the findings of earlier chapters, thus strengthening the larger body of evidence drawn from the several chapters. Chapter 5 showed that a lively willingness to communicate during emotion, when combined with training and consultation for organizational development, seemed to enhance the willingness of teachers to collaborate with one another -- a willingness which we used in that chapter as an indicator of responsiveness.*

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* In Chapter 5, the questionnaire items that indicated responsiveness told us about the willingness of teachers to collaborate. In this chapter, the questionnaire items reveal the collaboration that was actually being undertaken in schools.

Chapter 10 has given evidence that after schools undergo the stress of some months of struggle toward collaborative or structural rearrangements, they are then likely to undertake curricular changes even though they have not carried the collaborative or structural changes very far. It seems likely that the sheer struggle for new collaboration or structure teaches a staff that constructive communication can be carried on even during stress and the kinds of emotion people feel when under stress. If a staff reduces its fear of continuing to communicate during emotion while braving the interpersonal stresses of serious innovation, then the effect seems likely to be similar to the one we saw in Chapter 5 -- that teachers become more ready to be helpful to one another in their teaching. This readiness, in turn, should make many kinds of curricular innovation seem less forbidding.

Also in this chapter, we examined the success of elementary schools in establishing collaboration and collaborative structure. There were five elementary schools in Kent that had (1) attempted this kind of innovation (A or B), that (2) existed before the 1972 assessment, and (3) received consultation and training for organizational development. Of these five, three (viz., K05, K11, K12) were the most successful of the Kent elementary schools in achieving collaboration or collaborative structure, according to the criterion we chose in this chapter. If we grant that innovation of the types A and B require effective communication, then we note with interest that two of the successful schools were the two that had received the greatest amounts of OD training: schools K11 and K12. This fits with our finding in Chapter 6 that the schools with the greater amounts of training achieved the higher levels of skill in three kinds of communication. Since school K05 received comparatively little training, it is surprising to see it showing up as a success in collaboration by 1972; on the other hand, its "B-score" was only 1, while K12's B-score reached the maximum of 3.

A fourth trained school, K13, did not fulfill our criterion for successful collaboration by 1972, but did seem (by the evidence in Figure 10-1) to have dispensed with the effort to do so with more dispatch than seven of the other nine schools that were also unsuccessful. As we said earlier, we are as happy to see a school skillful enough to reject an innovation with dispatch as we are to see it put one into action with dispatch.

The fifth trained school, K02, did not reach our criterion for collaboration and did not dispense with the effort with dispatch. This school received only a small amount of training and received it very late. This fact, too, fits the findings of Chapter 6 concerning amount of training.

Finally, we saw in all the earlier chapters and again in this one that school K12 always stood out with special distinction. This was the school that received the most hours of training and the most installments of training over the years. Given the fact that this school showed an unusual pattern of difficult but highly successful innovation, maintaining it from 1970 through 1972, and at the same time showed up high on the variables we discussed as relevant in earlier chapters -- this school's special distinction also adds strength to the pattern of evidence.

All these findings support one another; each strengthens our confidence in the others. If we had encountered different results at any point, our confidence in the remainder would have been weaker. If no school that gave up school-wide collaborative effort had gone on to curricular innovation, if the trained schools that succeeded in collaboration or that gave it up had not shown a more precipitous decline in reports of B-innovations than other schools (as they did show in Figure 10-1 and Table 10-4), if school K12 (the one with the most training) had not turned out to be the most distinctive -- if any one of these things had happened, our conclusions would have been seriously weakened. As it is, however, the "construct validity" of this cluster of findings seems to us strong.

Aside from the substantive findings just reviewed, there are some other sorts of lessons to be learned from the data. (1) Our data document the fact that these school districts spent an inordinate number of person-hours fussing with "innovations" that did not, in the end, become a very fruitful part of the work of most schools, at least according to our criterion -- and presumably this happens to an important degree in other school districts as well. (2) These data, combined with those from other studies, give evidence that there exists a technology -- organizational development --

that can cut away some portion of the otherwise wasted effort. (3) The trends revealed by the four times of data-collection and the comparisons made possible by the technique of multi-dimensional scaling suggest a way for governmental agencies and private foundations to make efficient use of the money with which they support research. Since almost every act of teaching or learning in a school takes place against a context of last year's customs and next year's hopes, almost no outcome can be confidently assessed except as it is embedded in the relevant trends. This means that most studies (excluding those of very short-term phenomena) that collect data at one or two times over a year or two must inevitably produce very shaky evidence and very shaky conclusions. At the very least, a study should collect data, (a) before the planned change, (b) just after the change has presumably been brought about, (c) a year later to see whether the school can maintain the new shape of things on its own, and (d) a year after that to see whether the effects of the new thing when it is now a familiar, perhaps routine thing that the school also did last year are the same sort of effects that accrued when the thing was experimental and fresh.

Finally, this study fits into a growing body of research on the fate of innovations in schools and on ways to facilitate their adoption or rejection. The picture that is emerging has two chief parts. The first part deals with diagnosis and readiness. Before the intervener (whether an insider or an outsider) asks anyone to begin doing things in a new way, he or she will do well to look at certain critical conditions. If a single one of these conditions does not exist, the chances of success for a complex social innovation are greatly reduced. Drawing upon the findings of this chapter and other chapters in this book as well as upon other literature in this area, we believe the following conditions to be crucial: (1) The central office must support the school in pursuing its own leads, or at least be permissive toward it. (2) The decision to move into the innovation must be almost consensual and the decision must be recycled continually. (3) The desire for collaborative work must be strong and widespread in the staff. (4) The anticipation of some pain, with the concomitant expectation that the pain will "purchase" something that is worth it, must be widespread. (5) The staff must exhibit a willingness to entertain unusual and even embarrassing ideas from its members. (6) The key leaders must intend to stay with the school for at least two years after the innovation starts.

The second part of the picture concerns conditions that must come about during the process of establishing the new way of doing things. If the innovation is to resist future threats to its continuation, these conditions must be maintained: (1) New norms for communication must be practiced that demand much more immediate, face-to-face information than is customary and allow much less postponement of the communication of information or suppresion of it than customary. (2) Systematic problem-solving processes that marshal the abilities and commitment of the working group must be adopted. (3) A norm of taking action (not just talking) in response to interior and exterior challenges must come about. (4) Norms and roles must be understood much more clearly and widely than is ordinarily now the case; in particular, the principal's consistency and clarity from the outset about his readiness to risk new norms is vital. (5) Procedures for quick feedback about progress toward goals must become a part of every major decision and every plan for action. (6) Ways must be found to maintain a lively effervescence of fresh ideas, even when they annoy. Again, if any one of these conditions fails to come about, the life expectancy of the innovation drops. We believe that all these conditions, both those necessary before an innovation and those necessary during it, can be produced if they do not already exist -- perhaps not in every school in the country, but surely in hundreds and thousands of schools.

Chapter 11

SCHOOL AND DISTRICT:
EFFECTS OF ORGANIZATIONAL TRAINING ON CONSTRUCTIVE ADAPTATION

Bell and Runkel
(final)

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Chapter 11

SCHOOL AND DISTRICT:
EFFECTS OF ORGANIZATIONAL TRAINING ON CONSTRUCTIVE ADAPTATION

Bell and Runkel
(final)

In the previous chapter, we examined the capacity of the Kent schools to perform as entire systems — specifically, how the schools as a whole coped with the press for innovation. We presented this capacity for processing innovation as an indicator of third-level skills. In this chapter and the next we present further evidence of third-level skills that was apparent in the Kent schools and district. Chapter 12 examines the Kent cadre as a system in itself, looking at its capabilities and effectiveness within and outside of the Kent district. We open the present chapter by taking a second look at our conceptualization of third-level skills, particularly constructive adaptability. We then discuss some of the problems associated with assessing third-level skills and follow by presenting the evidence of third-level skills in the Kent schools and district.

Third-Level Skills and Capacities

In Chapter 3 we presented four marks or criteria of constructive adaptation we believed essential for healthy organizational functioning. The four criteria are briefly:

1. Instituting problem-solving sequences when progress toward a goal is found to be unacceptable or when norms that serve constructive

adaptability are seen to be weakening. This ability rests, in turn, upon the ability to maintain sources of accurate and relevant information, upon maintaining communication channels that can convey the information accurately and swiftly to those concerned, upon the readiness of organizational members to volunteer relevant information, upon norms for group work that support effective reconsideration of goals, upon ability to uncover conflicts, upon ability to carry through a problem-solving sequence effectively once the need is agreed upon, and upon all the other first-level and second-level skills we have discussed.

2. Maintaining access to fresh ideas and other personal resources. To maintain constructive adaptability, the organization must make occasions and seek out situations in which potentially useful ideas, abilities, and methods can be exposed to view.[*]

3. Taking action. This organizational ability means being able to make use of the new ideas, abilities, and methods available to the organization. To be constructively adaptive the organization must be able to act upon and make use of the variety made available to it.

4. Assessing movement. This organizational ability refers to the organization's use of methods to chart long-term trends, assess different effects on different subsystems, and monitor the interaction between the organization and the environment. In general this is the ability to collect and make use of valid information about the internal and

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[*] Throughout this book we have used the phrases "access to the variety pool" or simply "variety" in reference to this ability.

external functioning of the organization.

The four organizational abilities in the above list imply that schools as open systems are interacting with the environment in which they are embedded. Maintaining this interaction between organization and environment can be viewed as the primary function of any organizational system. Unfortunately, this very process is often deficient in schools and districts. Our selection of the four criteria of constructive adaptation as well as our conceptualization of the capacity in theory was done with this interaction between school and environment in mind. By definition, a school or district that has built a continuous capacity for constructive adaptation will be able to act upon the changes in environmental events with dispatch, efficiency, ease, and foresight. Further, the need for skill in constructive adaptation increases as the environment of the school or district becomes more volatile and experiences more rapid changes. Certainly the demands, limitation, expectations, and values pressed upon schools by their environments are nowadays in a state of constant change, evaluation, alteration, and re-evaluation.

If one views schools as adaptive, problem-solving, open systems, then inferences about organizational health or constructive adaptation must be based on the processes the school uses in coping with environmental changes. The concept of constructive adaptation emphasizes the organization's evolution -- the structural and procedural changes that it undergoes in response to the environment. The school is viewed as constantly changing and evolving new structures and processes to contend with environmental pressure. In the following section we present three processes, capacities or capabilities that are common to this process of evolution or morphogenesis.

Constructive Adaptation

Some insight into the processes of constructive adaptation is provided by Weick (1969) in his discussion of sociocultural evolution and the processes of organizing. Buckley (1967) presents similar ideas in his discussion of "morphogenesis". Both of these authors view organizations as systems that carry on interchange with their environments. Both hold this interchange with the environment as the fundamental manifestation of an adaptive system.

It is important to point out that we are less concerned with what is evolved than with the processes of constructive adaptation. We are less interested in particular structures or norms that arise than in the use a school or district makes of structures or norms to heighten constructive adaptation. The processes we assign to the third level, furthermore, are those that reach beyond particular parts of the organization, though certain parts of an organization may be more involved with one process than another. Also, an individual, a group, a subsystem, or the organization as a whole may be engaged in different processes supporting constructive adaptation to varying degrees over an extended period of time.

Using Weick's terms, there are three essential processes that characterize the interaction of an adaptive system or organization with its environment -- variety, selection, and retention. We shall briefly discuss each.

Variety

Probably the most obvious process that characterizes adaptation is variety. Any adaptive system must maintain mechanisms for generating different ways of dealing with the demands of the environment. A school or district must provide "climate" and procedure to bring into visibility different views, skills, opinions, ways of doing things, and methods of dealing with daily functions. The school or district must encourage staff members to try new methods, to seek out different approaches, and to look for alternative modes that can be shared with other members of the staff.

Access to variety is often haphazard and unplanned. But human organizations have the potentiality of heightening the variety of their responses to environmental challenge through methods that are rational, planned, and regularized. This is not to say that variety in most human systems is at present rational and planned; rather, it is to say that it is possible and feasible for schools and districts to develop much more rational and regular methods of expanding the variety of their responses than are now typical. To the degree that members of an organization become aware of present recurring patterns and discover the principles inherent in the interaction between the organization and its environment, the possibility of a rational, planned search for variety increases.

Selection

The primary function of the selection process is to extend or eliminate, strengthen or weaken various forms of variety. Weick (1969) points out the usefullness of differentiating between selection mechanisms and selection criteria. We describe these factors separately below.

There are several selection mechanisms which function concurrently during the life of any human system. Some of the more relevant ones are mentioned below.

1. Selection by survival. This mechanism most parallels the selection process of biological systems. It works through the "death" and elimination of organizations or parts of organizations because of their inability to cope adequately with the demands of the environment.

2. Selection by tradition. This mechanism selects structures or procedures that have become customary. It is represented by the statement, "That's the way we've always done it."

3. Selection by imitation works through borrowing or imitating the methods of prosperous, successful groups or organizations.

4. Selection by promotion and reward. Individuals or groups whose variations appear more adaptive are elevated to positions of authority or rewarded by an increase in income, fringe benefits, etc.

5. Selection by planning uses conscious planning, forecasting and anticipating to select those forms of variety that appear to be best suited to the immediate or expected needs of the organization. Weick (1969) points out that there are two choice points in planned selection: a "noticing" choice and a "doing" choice. One must first become aware of possible alternatives and chose to ignore or attend to them. This is the "noticing" choice. One can then move consciously to modify the actions of the organization. This is the "doing" choice -- acting upon or not acting upon certain elements among the noticed variety. The noticing choice can require revising the selection criteria. The doing choice can require revising the method of searching for variety; it can also require revising the retention process.

Selection criteria are almost innumerable. In schools, criteria proliferate because of the ambiguity of educational goals and because of the tremendous variability of the environment. Like other social systems, schools use two types of selective criteria: criteria demanded by the internal functioning of the system and criteria demanded by the functioning of the system with its environment. Unfortunately, the two types of criterion -- internal and external -- are often incompatible. The internal criteria typically maintain the stability of the system, while the external criteria are typically chosen to maintain adequate response to environmental demands. For example, the external criteria may require that old organizational positions and procedures be eliminated or adjusted to meet new environmental needs. However, the internal criteria with its emphasis on the stability of preserving the system may work to maintain those positions and procedures. If the internal criteria are given too much consideration by the organization, the system will soon become encumbered with irrelevant archaic positions and procedures.

Retention

The third process consists of mechanisms for storing and preserving modes of action. It is not, however, simply a memory system. The retention process preserves and propogates actual behavior and protects it with norms, roles, sanctions, and the like. The retention process is made up of organizational methods and forces that maintain existing organization.

The variety and retention processes are often opposed. This is especially true of complex organizations that have evolved elaborate structures and procedures for dealing with the environment. The more elaborate the organization, the more vulnerable it becomes to variation. To lessen disruption, it simultaneously becomes more resistant to change.

The retention process responds to information about past events, while the variety process responds to information about immediate events. To the extent that there is contradiction between past and present information, there will be conflict between the retention and variety processes. This conflict poses special problems for organizational change efforts. In schools and districts embedded in rapidly changing environments, some internal reorganization of the retention system may be necessary to increase the adaptability of the organization. In particular, it is often necessary to establish a method of retaining a variety of new ideas from outside and a variety of methods of selecting and adopting these new ideas. The notable method of retaining variety that we have described in this book is the cadre of organizational specialists.

Appropriate Use of the Processes

We have now presented three processes characteristic of living, adaptive systems; variety, selection, and retention. For an organization to be constructively adaptive, it must balance these processes in appropriate ways. To be constructively adaptive, an organization must obviously maintain some interchange with the environment. In fact, this characteristic is true for all open systems, whether they are constructively adaptive or not. It is the appropriate use of the processes of variety, selection, and retention that characterize the constructively adaptive organization. We mentioned that some reorganization of the retention system is usually necessary if organizational change is to be brought about. The reason is that the retention system serves as the medium through which the other two processes -- variety and selection -- are carried out. The constructively adaptive organization must maintain a retention process that allows for maximum use of the variety process and promotes the use of the selection mechanism through conscious, rational planning.

It is helpful to view selection as the process that brings the variety and retention processes together. Within the life of an organization, there are times when variety must be given priority, especially when the organization or its environment is undergoing rapid change. At other times, it is advantageous to maintain the existing ways of doing things. The constructively adaptive organization relies upon both the variety and retention processes -- it shifts the priority from one to the other. Ideally, it shifts from the one process to the other with conscious planning. In other words, the constructively adaptive organization has a capability for consciously selecting the process, variety or retention, that will be given priority according to the problem at hand. It makes this selection on the basis of information about the internal and external problems of the organization.

Finally, the constructively adaptive organization is characterized by an active, viable variety process -- one that makes use of the resources within the organization and seeks new ways of doing things from outside the organization. Further, the process is not haphazard; rather, it is guided by the knowledge of past endeavors and the expectation of future events.

In sum, the constructively adaptive school or district is characterized by: (1) an active, systematic process for eliciting variety, (2) a consciously planned selection process, and (3) a flexible retention process that maintains access to variety as well as the planned selection process.

Problems of Measurement

Ultimately, the best measure of a constructively adaptive system is its ability to adapt to a changing environment so as to continue progress towards its goals. Unfortunately, this statement specifies no limits -- no guiding parameters -- that can be used to judge whether adequate adaptation has taken place. For example, how swiftly must an organization adapt to an environmental change to be classified as constructively adaptive? What constitutes an adaptive response -- some form of innovation or a vigorous maintenance of an existing method? If an organization develops a new method for doing things, how long must this new method be maintained before it is considered stable? How much can an organization modify its goals to meet environmental demands and still be considered as progressing towards its goals? These and other questions arise when one tries to assess the constructive adaptability of an organization.

Most, if not all, of the problems raised by the above questions arise from the fact that any indicator of constructive adaptation is contextually bound to the environmental factors that surround its occurence. The appropriateness of any organizational behavior that may be used as an indicator of constructive adaptation can be determined only in the light of the environmental conditions in which it occurs. Furthermore, it is easy for different observers to disagree on whether a particular act of constructive adaptation is constructive, stable, innovative, or whatever. To us, the superintendent and his cabinet were showing constructive adaptation in 1970 when they changed the mode and purpose of their weekly meetings. To us, the Kent cadre took many constructively adaptive steps to meet the threats from their environment (see Chapter 12). But these examples may not be as persuasive to others.

Certainly, one occurence of a particular type of behavior is not sufficient to indicate the attainment of constructive adaptability. Assessing constructive adaptation requires us to establish patterns of responses that can be classified as adaptive. If a school's staff asks for special training on a single occasion, this does not mean that the school is skilled in maintaining access to variety. However, if a school staff asks for training as one means of getting new ideas and at the same time uses several other methods that interact productively with the training, the overall pattern could indicate a healthy variety process. As another example, if a school's staff asked for an integrated series of special training events over a period of years, this also might indicate a healthy variety process.

In sum, in assessing the constructive adaptation of any organization, one must consider the environmental context in which the organizational response occurs. Additionally, one must find patterns of behavior that can be classified as adaptive. The patterns can be documented in two ways: (1) by the existence of several activities whose commonality establishes a pattern; or (2) by the recurrence of a single type of adaptive behavior, appropriately modified over time.

This kind of data is difficult and costly to collect, and it is subject to all the problems of interpretation that were mentioned earlier. In earlier chapters of this book, we have relied on indirect evidence. Our reasoning in the earlier chapters went something like this. We postulated that characteristics A and B were prerequisite to attaining characteristic C. Then, if we were able to show that a school possessed characteristics A and B, we argued that the school was at least more likely to have characteristic C than a school that did not have characteristics A and B, or that the school was "on its way" to achieving characteristic C. This kind of reasoning underlay our postulation of three levels of skill (see Chapter 3).

In the present chapter, we turn to more direct evidence of constructive adaptability. Much of the evidence will consist of patterns of behavior in the organization as a whole.

Evidence of Constructive Adaptation

During the early stages of the Kent project, our understanding of constructive adaptation was only beginning to take form. Consequently, we were not guided by the concepts of variety, selection, and retention when we documented the activities of the Kent schools and district. We did, however, maintain rather detailed files on the activities of the schools and district that involved the cadre -- the internal group of organizational specialists. We condensed our files and prepared a list of events that included activities of the cadre (and also in some instances, CASEA) from the fall of 1968 to the spring of 1974. The complete list of activities is presented in Appendix 4-A. Together with the major events described in Chapter 2, the district's use of the cadre of organizational specialists constitutes our major record of ways that the Kent district and its schools exhibited ability at seeking alternatives, selecting new methods for trial, and retaining certain of them. No doubt the schools and district engaged in many activities during the years of our study that could give evidence for or against their skill in constructive adaptability but of which we remain unaware. We would be happier if we had a thorough-going record of every decision by any individual or group to initiate a new departure and of every decision not to do so. It would have been interesting to end our study with an assessment of the ability of the district as a whole to act adaptively. Our data do not permit us to do so. We must limit our inferences to what we can deduce from the use the Kent schools and district made of the cadre.

But if we cannot assess the Kent district in all its activities, we can at least assess its use of the cadre of organizational specialists, and it is especially relevant for us to do this, because our primary purpose was to discover what benefits could result from our OD intervention, and especially that phase of it that established the Kent cadre. Consequently, we present below the patterns of activity surrounding the uses schools and district made of the cadre.

We begin with a sheer listing of activities of the cadre that occurred within the Kent district with school personnel, parents, or students. The list excludes the cadre's activities outside the district or outside the business of schooling. As well as listing the activities of the cadre, we also list the relevant interventions of CASEA that sometimes preceded the entry of the cadre. The list has four parts: (1) schools, (2) district-wide groups, (3) central-office groups, and (4) parent and student groups. Each line of the list tells the date of the intervention, the portion of the school or group with whom the cadre or CASEA dealt, the number of hours or days spent, the purpose, and whether the interveners were the cadre, CASEA, or both. After presenting the list, we shall describe certain of the events or patterns in some detail.

Work With the Kent Schools

Elementary School K01

(a) February 1974; staff; 2 hours; diagnosis; Cadre
(b) April 1974; staff; 3 hours; data feedback; Cadre
(c) August 1974; staff; 12 hours; training; Cadre

Elementary School K02

(a) August 1970; staff; 7 hours on each of 2 days; training; Cadre
(b) November 1970; staff; one meeting; feedback from interviews; Cadre

Elementary School K04

December 1973; staff; 4 hours; diagnosis and data feedback; Cadre. See also under Parent and Student Groups

Elementary School K05

(a) October 1968; staff; one meeting; planning; CASEA
(b) November 1968; staff; one meeting; interviews; CASEA
(c) January 1969; staff; one meeting; feedback; CASEA
(d) March 1969; staff; 6 hours; training; CASEA
(e) August 1970; staff; 6 hours; training; Cadre

Elementary School K07

August 1972; staff; hours unknown; purpose unknown; Cadre

Elementary School K08

October 1973; administrators; one hour; diagnosis; Cadre

Elementary School K10

See under Parent and Student Groups

Elementary School K11

(a) October 1968; staff; 2 meetings; interviews; CASEA
(b) November 1968; staff; one meeting; feedback; CASEA
(c) December 1968; staff; 9 hours; training; CASEA
(d) February 1969; staff; one meeting; planning; CASEA
(e) March 1969; staff; 6 hours; training; CASEA

(f) August 1970; staff; 6 hours on each of 4 days; training; Cadre
(g) October 1973; administrators; one hour; diagnosis; Cadre

Elementary School K12

(a) August 1969; staff; 10 hours in 2 days; training; CASEA and Cadre
(b) December 1969; staff; 4 hours on each of 2 days; training; CASEA and Cadre
(c) August 1970; staff; 7 hours on each of 2 days; training; Cadre
(d) January 1972; staff; 7 hours on each of 2 days; training; Cadre

Elementary School K13

(a) March 1970; staff; 2 hours on each of 5 days; training; Cadre
(b) August 1970; staff; 5 hours; follow-up; Cadre

Elementary School K14

(a) August 1970; staff; 3 hours on each of 7 days; training; Cadre
(b) November 1970; staff; 3 hours on each of 2 days; follow-up; Cadre

Elementary School K15

(a) August 1970; staff; 22 hours in 4 days; training; Cadre
(b) October 1970; staff; one meeting; process consultation; Cadre
(c) December 1970; staff; one meeting; discussion; Cadre

Junior High School K22

(a) September 1969; principal and some teachers; 2 hours; diagnosis; Cadre & CASEA
(b) September 1969; staff; 2 hours; training; Cadre & CASEA
(c) October 1969; staff; 2 hours; training; Cadre & CASEA

Junior High School K23

(a) October 1968; staff; one meeting; group interviews; CASEA
(b) November 1968; staff; one meeting; feedback; CASEA
(c) January 1969; staff; one meeting; planning; CASEA
(d) February 1969; cabinet subgroup; 2 meetings plus 4 hours; training; CASEA
(e) February 1969; small groups; one meeting; planning and training; CASEA
(f) February-March 1969; department group; 3 meetings; training; CASEA
(g) March 1969; staff; 7 hours; training; CASEA
(h) May 1970; staff; 3 meetings; process consultation and training; Cadre

High School K31

(a) October-November 1968; staff; 2 meetings; interviews and feedback; CASEA
(b) Winter 1969; department chairmen and administrators; 4 meetings; entry discussions; CASEA
(c) Spring 1969; department chairmen; 3 meetings; training; CASEA
(d) Spring 1969; department chairmen and administrators; 2 meetings; planning; CASEA
(e) Fall 1969; department chairmen and administrators; 5 meetings; process consultation; CASEA and Cadre
(f) November 1972; administrators; unknown hours; process consultation; Cadre

High School K32

(a) October-November 1968; staff; 2 meetings; interviews and feedback; CASEA
(b) January 1969; administrative group; 3 hours; process consultation; CASEA
(c) January 1969; humanities department and coordinator; 5 hours; imaging; CASEA
(d) February 1969; staff; 3 hours and one meeting; problem solving; CASEA
(e) March 1969; administrators; 2 hours; planning; CASEA
(f) April 1969; cabinet; 15 hours in 3 sessions; training; CASEA

Work with District-Wide Groups

Superintendent's Seminars

From December 1971 through June 1973 meetings approximately once a month for superintendent and groups of individual staff members from the district; Cadre convenes and facilitates; about 2 hours each; numbers in attendance unknown.

Social Studies Advisory Committee

November 1972 and March 1973; 2 meetings of 50 persons facilitated by Cadre

Foreign Language Committee

January 1973; facilitation; Cadre

Kent Education Association

(a) Beginning in January 1971; process observation at meetings of 50 member representative council; Cadre

(b) Spring 1971; problem solving sessions for representative council and executive board followed by confrontation meeting; Cadre

School Board Meetings

Fall 1970; "some" meetings; unknown hours; process consultation; Cadre

Principals

July 1970; ½ day; training; Cadre

Communication Survey

October 1973; unknown hours; superintendent commissioned a survey of all school staffs to ascertain their desires about communicating with him. Completed by Cadre by January 1974; Personnel Department helped compile data. Results fed back in writing to principals and Cadre.

District Budget Election Committee

December 1971; one meeting; Special Levy Seminar; facilitation; Cadre
November 1972; unknown hours; problem-solving training; Cadre

Work with Central Office Groups

Superintendent's Cabinet

(a) January 1970 through September 1971; process observation; Cadre
(b) July 1970; one week; training; Cadre

Curriculum Development Division

July 1970; one week; process consultation; Cadre

Superintendent's Summer Workshop

August 1973; 3 days; facilitation; Cadre

Work with Parent & Student Groups

PTA Presidents and Building Principals

May 1970; one meeting; facilitation; Cadre
September 1973; one meeting; training; Cadre

Elementary School Staff and Parents

May 1970; "some" meetings; conferences between staff and parents of K10 establishing drop-in center to deal with drug problems; facilitation; Cadre

Spring 1974; staff & PTA members of school K04; one meeting; training; Cadre

PTA District Organization

1972-1973; 2 meetings; facilitation; Cadre

April 1973; one meeting; problem identification session; facilitation; Cadre

Multi-Ethnic Camps

(a) September 1969; weekend camp designed to acquaint students with the complexities of inter-personal and group relations; 40 students in attendance; facilitation; cadre.

(b) May 1970; weekend camp; 80 students in attendance; facilitation; cadre

(c) May 1971; weekend camp; 100 students in attendance; facilitation; cadre

We shall next provide more detail about certain events particularly relevant to this chapter. We shall also summarize certain findings from other chapters that provide evidence for the healthy functioning of the processes of variety, selection, and retention.

Variety

Undoubtedly, many of the Kent schools and district organizations sought to make use of their resources, expand their abilities and skills, and provide new and different services in ways of which we are not aware. Of those activities we have documented, we have chosen four examples that we believe indicate the presence of a lively search for variety.

Climate of Innovation. A good example of the salience of the variety process in the Kent district was the extensive efforts of most of the schools toward new forms of organization and curriculum. We discussed these in Chapter 10. We reported there that in 1968 the largest portion of staff in about half the Kent elementary schools reported collaborative innovations as the type of innovation they were pursuing. By 1969, 83 percent of the school staffs reported that they were involved in collaborative innovations. Clearly, many people in many of the schools believed that something new and different was going on in their school.

Although the successful implementation of the more difficult innovations was infrequent, the climate of innovation influenced other areas of the Kent schools and district. Consequently, during the years 1970 to 1972, many of the school staffs reported attempts at presumably less difficult curricular innovations. What seems apparent from the data in Chapter 10 is that the Kent schools were busily trying out new ways of doing things during these years

The documentation of innovative efforts we have presented here and in Chapter 10 seem to us to provide evidence that the district as a whole was tapping its variety ppol; it exhibited a very active effort to try new organizational schemes for teaching and functioning. It is irrelevant to the foregoing point whether the innovative effort arose from teachers, students, principals, superintendent, or school board. The fact is that many staff members were for some time engaged in innovative efforts. This innovative surge began before the cadre existed. Some of it began before CASEA entered the district. Certainly, it was not due to CASEA or the cadre — it was a locally generated effort. This innovative surge indicates the presence of an active variety process in the Kent district.

Reaching out for Training. One of the most obvious examples of the process of variety in the Kent schools is their extensive use of the cadre and CASEA during these years. Among the elementary schools, eleven of the fifteen had made use of the cadre in some way or other by the fall of 1974. All but two of the eleven requested some form of training by the cadre. The schools not only used the services of the cadre, most used them on several occasions over the years. A good example of the repeated use of the cadre or CASEA is school K05. From the fall of 1968 to the fall of 1970, school K05 made use of the consultants at five different times: identifying problems and receiving training. One important aspect of this school's activities is the way in which the staff joined in planning the help they received. Rather than simply going through a series of training events, they actively participated in planning the events and identifying problems that were important to them.

After CASEA's departure from Kent, the cadre never pressed its services on clients. Every item in the list above that gives the cadre alone as the consultants is an instance of the client initiating the contact and eventually requesting the cadre's services. Every one of these instances, in our opinion, is an evidence of a lively search for variety -- for a new way to cope with problems. Not only did school staffs request the cadre's services, but so did many sorts of district-wide groups, central-office groups, and groups containing parents or students. Clearly, the cadre reached -- was invited to reach -- much farther and deeper into the life of the Kent district than did CASEA.

During the course of the Kent work, CASEA gave some training to six of the eleven elementary schools that eventually received training from the cadre. Two of these six received training from consultant teams that contained members from both CASEA and the cadre. Two others of the six turned to the cadre after favorable interaction with CASEA, and the remaining two reached out to the cadre for help even though they had unfavorable experiences with CASEA. Similarly, one of the junior high schools (K23) was displeased with CASEA's intervention, but nevertheless called upon the cadre later. The commitment to variety displayed by the schools that called on the help of the cadre after unfavorable activities with CASEA can be seen as a further example of the persistent urge for organizational skill improvement -- an important kind of press for variety -- that was present in the Kent district. Not only was the climate favorable to innovation in the Kent district, but the schools and other groups actively participated in training of the sort that would improve their skills and increase the variety of sources from which they could draw.

New procedures for new problems. One indicator of constructive adaptation is an organization's ability to respond to new environmental demands by providing new structures or procedures to meet those demands. A clear example occurred in school K10. During the fall of 1969, like many other schools across the nation, school K10 found the use of drugs increasing among its students. In an effort to deal with this problem, the school held a series of conferences with parents and concerned members of the community. To ensure the productivity of these meetings, the staff called upon the cadre to facilitate the interaction. In the spring of 1970, these efforts led us to the establishment of a "drop-in center" where adults and students could "rap" about their concerns about drug abuse or other problems disrupting family life.

This example is an especially happy one because it also illustrates conscious attention to the processes of selection and retention. The school staff actively sought the ideas and participation of parents, students, and other members of the community. In addition, they brought in "outside help" (the cadre) to facilitate the meetings. This active solicitation of a variety of opinions, the use of a variety of people, and the explicit attention to both the task and process -- all these in combination -- seem to us to indicate an unusual understanding of the dynamics of organizing and an unusual skill in setting up a new substructure.

A second example of the Kent district's use of new methods to deal with unforeseen events is provided by the activities of the district administrators and directors during the budget crisis of 1970-71. The financial situation in the district reached crisis proportions early in 1970 when a big budget deficit coincided with the start of a severe economic recession in the Kent-Seattle area. The district was discovered to have a deficit of $1.85 million, in a budget of approximately $12 million, because of a series of administrative errors in budget preparation over several years. Meanwhile, booming Boeing suddenly went into a tailspin and dragged the entire region's economy down with it. Unemployment in the Seattle area reached as high as fifteen percent of the work force.

In 1970, Washington voters rejected a proposed state income tax, a measure sponsored by the state education association and others chiefly to generate revenue for schools. The financial support from the state legislature continued its decline of previous years, and local tax collections were below expectations.

After the deficit was discovered in the district's budget, certificated staff in Kent were cut from 718 to 620, despite an expected increase of 1,200 pupils. The number of assistant superintendents was reduced to four, half the number recommended in 1966-67 by the management consultants. The district eliminated plans to improve libraries, reduced positions for teacher aides, cut business and other services, put off buying equipment and supplies, and eliminated most in-service training as well as most extended contracts for teachers.

In May 1970, voters overwhelmingly rejected a special levy submitted to cover the deficit (and a building bond issue on the same ballot), and the district began to "borrow" from its 1971-72 budget to meet the shortage. Some school patrons started recall proceedings against some school board members. Some professional staff sued the district to recover jobs or extra-salary "point factors" that had been cut. The new assistant superintendents left the district rather than accept classroom teacher contracts, and the business manager resigned. The Kent Education Association publicly attacked the district's administration and its handling of finances. In short, the world around the district had become a dismal swamp full of sharp-toothed surprises.

Even in the face of such extreme shortage and uncertainty, however, the Kent schools continued to reach out to the cadre to improve their skills. This was especially true of the superintendent and his staff. They not only encouraged other schools and district organizations to use the services of the cadre, but they called upon the cadre for special training in problem solving and for facilitating their effort to find a swift and workable solution to the budget problem. They actively sought out the variety of resources available to them from within the district and used this variety to reach a solution to the problem as well as to implement the solution. In fact, by mid-1971, the district's coffers were beginning to fill again, and by the following year, there was even a small surplus! From the viewpoint of maintaining access to variety, it is important to note that even during this period when all sorts of expenditures were being severely curtailed, the district still continued the cadre's small budget. In fact the success of the cadre in assisting the district during this time of financial stress that prompted the superintendent to respond in the following manner: "I firmly believe that the CASEA assisted communications program in Kent (the cadre of communication specialists) made it possible for Kent's school program to survive during this period of financial adversity and rapid growth."

These particular examples, together with those listed earlier, lead us to conclude that in many respects the Kent schools and district were actively expanding their skills and abilities, seeking out new ways of doing things, and using the differences among their personnel. Though lively variety-seeking goes only part way toward constructive adaptation, it is a necessary and vital part. And we have seen in earlier chapters that vitality in variety characterized the schools that also showed the ability to take action or maintain innovation.

Selection

The process of selection is often so closely tied to the other processes that it is difficult to discriminate them. For example, we described a selection mechanism that we labelled "selection by reward and promotion." However, since reward and promotion can be used to maintain certain behavior that has been useful in the past, they can as easily be viewed as part of the retention process. Similarly, selection can look like variety. In the previous section, we documented the use of the cadre by the schools and district organizations of Kent. We described the activities as instances of the organization's reaching out for variation from their normal routine -- the variety process. But the same reaching out can be seen as the selection process. The very fact that the schools chose to become involved with the cadre says something about their selection processes.

To show that a school or district is acting in a constructively adaptive manner, it is not sufficient to demonstrate the presence of the selection process -- all organizations possess selection mechanisms. What is important is the method of selection -- its efficacy and its cost in time and energy. To gather information on the workings of the selection process is truly a difficult task, and one we did not accomplish in Kent. We were able, however, to extract some information about the speed with which the Kent elementary schools chose to implement or reject innovations.

The constructively adaptable school will select innovations in a planned way. It will monitor each innovation it undertakes, checking progress, costs, and benefits. It will marshal its energies to make the innovation work. But, if monitoring shows that costs are promising to exceed benefits, the school will be able to drop the innovation decisively and waste no more time upon it. In our discussion of innovations in Chapter 10, it seemed clear that many of the Kent elementary schools began collaborative innovation in 1968 or 1969, and most of the staff members in the schools knew that something innovative was under way. But two or three years later, many of these schools had about a third of the staff still believing that the innovative effort was continuing. This seemed to us the wrong proportion. If the innovation was indeed still being pressed, the proportion aware of it should have been higher. And if the innovation had been dropped, fewer should have thought it was still under way. In respect to selecting innovations, the Kent district as a whole did not seem to be performing the selection function with much efficiency. Six elementary schools, however, were much quicker either to bring the main features of the collaborative innovation into regular action or to drop it early: K05, K11, K12, K13, K07, K08. The first four of these had received training for OD before their main innovative effort or during it.

That is all we can reasonably say about the selection process in Kent. We turn now to retention.

Retention

A constructively adaptive retention system maintains the vitality of the variety process as well as the planned nature of the selection process. In this section, we examine some examples of retention in the Kent schools and district organizations.

Maintaining organizational training. We saw in the section dealing with variety that the Kent schools often made repeated use of the cadre over the years. The clearest case of repeated use of OD training in serious amounts is the case of school K12. School K12 first undertook training with the cadre and CASEA in August of 1969. This event was followed by a second session of training in the winter of 1969. After experiencing the training and discussing its benefits, the school staff asked for additional training at the beginning of the next school year. They requested a similar session in January of 1972. This repeated use of training by outsiders (CASEA and the cadre) can be seen as an example of the way in which a school can develop a norm that retains regular access to organizational variety. School K12 freed its staff from other activities and committed them to extensive training on four different occasions over the course of three-and-a-half years. And it followed this policy with sufficient regularity that the training approached a normal activity of the school.

This example of school K12's establishment of training as a "regular" event would be stronger if we had information about training after the winter of 1972. Unfortunately, we do not. However, school K12 certainly came close to setting up regularized occasions for self-renewal -- the kind of institutionalizing we believe to be critical if the retention system is to maintain the vitality of the variety process.

Establishing meeting procedures. Early in 1970, the superintendent and the cadre initiated a procedure in which two cadre members observed the superintendent's cabinet meetings and gave feedback on the processes that were used. The meetings were regularly attended by the superintendent and his immediate advisers, and they issued a blanket invitation to anyone who would attend as a representative of some group in the district. (In practice, no one's credentials were examined.) After a few months of this type of participation, a new format took shape. The changes included having the superintendent act as a participant rather than chairman, defining the function of the meeting as information gathering and sharing rather than decision making, and opening the agenda to items of general interest that required reaction from a broad spectrum of the district. Descriptions of the new format for the superintendent's meeting were sent out to encourage representatives from schools, departments and groups in the district to attend. Some excerpts from this document appear below.

> To the new participant at the Superintendent's staff meetings: Here's some information that may be helpful to you . . . .
>
> WHAT ARE THE PURPOSES FOR HOLDING STAFF MEETINGS?
>
> To provide the members of different District organizations and groups with the opportunity to ask questions and give feedback to the various agenda items;
> To give you information regarding those items on the agenda;
> To help the Superintendent become aware of the reactions of some staff members to issues.
>
> WHAT KIND OF ITEMS WILL BE ON THE AGENDA?
>
> Those kinds of items that have a general interest. Information that needs little reaction will not usually be brought to staff meetings.
>
> ARE DECISIONS MADE AT STAFF MEETINGS?
>
> No, they are not. Decisions are made by the administrators of the various programs through proper channels.
>
> WHO IS IN CHARGE OF THE STAFF MEETINGS?
>
> The Superintendent is in charge. But in this role he will usually request other persons to make presentations to the group and to serve as moderators for parts of the meeting. In this way the Superintendent can function more as a member of the group.
>
> WHAT SHOULD YOU DO AT THESE MEETINGS?
>
> You should discuss or question those items on the agenda where what you are thinking would make a contribution to the group. You should not feel any compulsion to speak on a topic unless there is a reason for you to do so; on the other hand, it is urged that when you have something to say that you do say it.
>
> WHAT WILL BE CONSIDERED THE IDEAL COMMUNICATION PATTERN IN THE STAFF MEETINGS?
>
> There is a subject appropriate for consideration;
> There is adequate reaction and feedback;
> Questions are asked in a constructive manner;
> Alternative approaches to problems are examined;
> Reporters show respect and appreciation for questions, and they avoid defensive behavior;
> Persons at the staff meetings feel they have reasonably

discussed the issues;
The Superintendent feels he has the information and
options he needs for decision making.

The fact of the new format is an example of variety. But the care taken by the superintendent, the cadre, and others who participated in the new format to inform others about it and to establish it as legitimate -- this follow-up to the format itself is an example of selecting and retaining the new format. It lasted until the arrival of the new superintendent.

Supporting the cadre. For us, an especially noteworthy evidence of the skill of the Kent district at retention was its maintenance of the cadre. We shall review in Chapter 12 the fortunes of the cadre over the years from 1969 to 1974. Here, we sketch briefly the support given to it by the Kent district during those years.

Naturally, we believe the cadre of organizational specialists to be about the best thing that happened to the Kent district since sliced bread. Our evidence, some of which has been given in previous chapters, argues that the cadre helped schools staffs to work more effectively together, helped other kinds of groups to cope with their interior and exterior problems, and symbolized for the whole district the necessity of paying attention to the problem of interpersonal processes along with whatever "content" problem arises. Having this view, we consider actions that supported the cadre to be evidence of "good" or "appropriate" retentive skill, and actions that weakened the cadre as "low" retentive skill. The Kent district supported the cadre in three ways; financially, organizationally, and morally.

Financial support came from the central office and the school board who supplied moneys to pay for teacher release-time, supplies, and other expenses. In addition the district supplied the cadre with financial support under the most severe conditions. Earlier we described the severity of the financial deficit facing the district in 1970. Considering the fact that the cadre was a fringe organization that did not directly participate in the instructional activities of the district, it is remarkable that the district continued its support of the group. It reveals the commitment of the district (or at least certain persons in the district) to maintaining the services the cadre offered.

Organizational support came in the form of cooperation throughout the district in coordinating the activities of the cadre with other functions. This was not a simple matter, for most of the cadre's activities required a fair amount of planning. Not only did the cadre members have to be released from other duties, but entire school staffs had to arrange to attend the activities.

Moral support came from throughout the district but especially from the central office and the superintendent. The superintendent who was there when we first started work in Kent gave clear, steady and unmistakable support to the cadre, and the superintendent who took charge in the fall of 1971 clearly cast official doubt on the usefulness of the cadre, though he issued an official statement of appreciation of their services soon after his arrival. By the fall of 1974, as we shall recount in Chapter 12, the Kent cadre was no longer receiving any financial support from the district, nor any official testimonial of status. Nevertheless, it was still providing services to the district.

In sum, the district began by retaining the cadre as an aid to its processes of variety, selection, and retention, and ended by relinquishing the cadre's services. Overall, we think most schools in Kent were able to make fairly good use of the cadre because the superintendetn who was there through 1970-71 made it legitimate for them to do so. Beginning with the 1971-72 school year, it became difficult for schools to make use of the cadre, because the new superintendent did not give clear signals that their use of the cadre would win his approval.

We should not lose sight of the fact that the Kent district, after the arrival of the new superintendent, may have selected and retained many practices and norms beneficial to it. Our records for those years are thin. In particular, it may be that the new superintendent's policy of discouraging innovations was a constructively adaptive policy for that time. The economy was failing and taxes were becoming more unbearable. It may be that consolidating existing procedures and regaining the confidence of the community was the first necessary goal.

Our sorrow arises from our conviction that the Kent cadre could have helped the new superintendent and his advisers with any task of communicating with the community that was necessary, and could also have facilitated communication between the superintendent and the schools personnel about program matters -- two functions, in fact, for which the new superintendent praised the cadre in 1971. We believe that the district lost vigor and flexibility when support of the cadre was relinquished.

Summary

We opened this chapter by discussing three processes of constructive adaptation -- variety, selection, and retention. We followed by presenting evidence of these processes in the Kent schools and district.

The evidence we gathered was limited to the activities of the Kent schools and district that involved the cadre. Even so, we think the evidence shows that the Kent district, at least before the new superintendent arrived, was strong in searching for variety, but rather weak in selecting and retaining this variety. The district's most sustained effort at retention (before the new superintendent arrived) was the support it gave to the cadre. Unfortunately, much of this support rested on the authorization of one man -- the old superintendent. Similarly, most of the Kent schools displayed strength in seeking out variety while being less able to select and retain that variety. As was shown in previous chapters, some schools did better on selecting and retaining the available variety, and they were usually the schools that received training from either CASEA or the cadre. In the following chapter we examine the cadre as a functioning system in the Kent district.

Chapter 12

THE CADRE AS A SELF-RENEWING SYSTEM

Runkel and Wyant
(final)

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Chapter 12

THE CADRE AS A SELF-RENEWING SYSTEM

Runkel and Wyant
(final)

The story of the Kent project is more than anything else the story of the Kent cadre of organizational specialists. The cadre began its work in late August of 1969. After that, the CASEA consultants operated in Kent only as helpers to the cadre, and CASEA withdrew from any active role with the cadre's clients in March of 1970. Consequently, OD consultation in Kent between August 1969 and March 1970 was largely the cadre's, though we of CASEA had strong influence on it. After March 1970, for all practical purposes, our influence ceased. The effects of training we described in earlier chapters in this book were largely effects of the cadre's work -- completely so after March of 1970.

We devote this chapter to the third-level skills exhibited by the cadre of organizational specialists in Kent. As we have seen in Chapter 11, several schools and other substructures of the Kent district did seek new modes of solution to their problems, did select new structure and process they believed would be effective, and did try to bring stability to the new modes. Among the schools that tried, only school K12 clearly maintained its new mode through the spring of 1972, as we have shown in earlier chapters. The other subsystem in the Kent district that built a new mode of operating and maintained it was the cadre of organizational specialists.

In Chapter 11, we described the work of the cadre as a medium or agent of constructive adaptation in the district. We examined the way schools and other subsystems in the district made use of the cadre. In this chapter, we shall examine the cadre as a system in itself, looking particularly at its third-level functioning -- at the way it opened itself to environmental variety, made selections among possible courses of action, and established customs and routines. In our scrutiny, we shall pay attention not merely to the fact that these three processes existed; we shall focus our attention on the evidence that the cadre made use of them in conscious, planned ways. We shall note how the cadre not only reacted, but also how it examined and altered its own reactions.

Variety

Throughout its history, the Kent cadre has actively sought to increase the variety of its alternatives both in its manner of working with clients and in its management of its own affairs. It sought to widen its alternatives in several ways. For the express purpose of stretching its skills, it boldly undertook work of kinds it had not done before and that we had not taught it. It was this purpose, even more than any financial reward, that lead it to accept commissions outside its own district and in organizations other than schools -- though the money was welcome, too. It organized itself in ways to respond quickly to the needs of clients, and at the same time to maintain lively communication among its own members. Periodically and persistently, the cadre held self-renewal sessions at which it inventoried its own internal resources, at which it strengthened its solidarity, and at which insiders or outsiders taught the group new skills. The memoranda and bulletins describing all these activities got thicker and thicker in our files as the months and years went by. We shall list the activities below, contenting ourselves with a sentence or two of description for each. For convenience, we list them under two headings: (1) work outside the district and (2) self-renewal.

Work Outside the District

At times, members of the Kent cadre undertook consultation or training for clients outside the domain of schooling or outside of Kent. This was not, of course, a required part of their jobs as members of the cadre; it was required neither by the district's job description nor by the cadre's own internal rules or expectations. These forays were primarily motivated, in our judgment, by an exploratory attitude on the part of individual members and by a desire on the part of most cadre members for some of their number to gain broader experience and bring the lessons back to the group. No doubt a few expeditions happened that did not get into our files, but the following list is probably fairly complete. Note that the cadre spent its first year "at home," and ventured abroad after its members had a year of experience behind them.

August 1970.	Some of the cadre conducted two days of training for the staff of school All in a nearby district.
November 1970.	Some of the cadre conducted a three-hour demonstration of OD for 55 principals of the Seattle area.
April 1971.	Some of the cadre conducted three days of training for the Career Opportunities Group of the Tacoma Model Cities Council.

May 1971.	Some of the cadre conducted one day of training for the Tacoma Model Cities Council.
May 1971.	Some of the cadre conducted two days of training for a Leadership Conference of the regional organization of the League of Women Voters.
June 1971.	Some of the cadre conducted two days of training for some members of the Othello School District in eastern Washington.
September 1971.	Two of the cadre conducted training with the RUPS and PETC packages of NWREL with personnel of the Office of the Superintendent of Public Instruction in Olympia. Further training was to occur December 29, 30, and December 1, 15, 16, and 17. We have no record whether it did.
October 1971.	Some members of the Kent cadre, along with colleagues from the Eugene cadre and CASEA, conducted three days of training with the staff of school F31 in the Federal Way District.
April 1972.	Some of the cadre conducted two days of training with the Community Committee on Child Care of Pierce County.
June 1972.	Some of the Kent cadre, along with persons from the office of the State Superintendent of Public Instruction and a professor from Central Washington State College, conducted training for some members of a newly-developed cadre in the Vancouver District; number of hours unknown.
November 1972.	Some of the cadre conducted training for staff of an elementary school in a nearby district; number of hours unknown.
November 1972.	The cadre acted as host for two days to representatives of half a dozen other school districts in Washington and Oregon who had begun to establish cadres of organizational specialists or who were planning to do so.
February 1973.	The cadre was invited to write (and did so) the history of its projects and accomplishments for Charles Blondino of the Office of the State Superintendent of Instruction.

March 1973.	Some of the cadre conducted training of less than one day for a regional PTA conference called "PTA 2000."
May 1973.	A member of the cadre joined colleagues from CASEA to put on a two-day demonstration of OD for administrators and some teachers of the Berkeley (California) School District.
October 1973.	Some of the cadre conducted a human awareness laboratory for high school and college students sponsored by NEA; number of hours unknown.
Spring 1974.	One of the cadre gave consultation to the Tacoma Urban League; number of hours unknown.
Spring 1974.	Some of the cadre gave consultation to a group of staff of a high school in the Renton School District; number of hours unknown.

Through activities like these, as well as through the work we mentioned in Chapter 11 (work within the Kent community but outside schools) the cadre members tested their mettle and broadened their horizons. We at CASEA had not taught them anything about working with a Model Cities program, a League of Women Voters, or a Committee on Child Care. We had not taught them how to make entry into a strange school district, nor how to help a new cadre develop. Yet they reached out to add this experience to their repertoire. When we heard about this work, furthermore, we often heard about skills they had newly acquired from elsewhere. For example, the cadre member who worked with the Community Committee on Child Care wrote to us that she "taught them the STP model of problem solving." At that time, the STP model was just coming into availability and was not even in published form. How she got it so fast, we don't know. In short, these forays out of the Kent community brought back increased variety of skill and setting to the cadre; it was customary for the cadre members back home to "milk dry" the returning specialist at the next meeting.

The question arises whether these excursions of the cadre should be considered remarkable. Don't teachers teach outside their own jobs -- Sunday school, for example? Don't administrators give talks at the Rotary Club and at Conventions? Certainly they do; but we think the Kent cadre displayed some distinctive features. To match the record of the Kent cadre, we think one would have to find a group of a couple of dozen people in a school or district whose outside ventures showed the following features.

1. They generally made their excursions not as individuals but as teams. When the cadre received a request for consultation, it was not enough for one member to be available. Two or more persons had to be broken loose from their regular schedules, and they had to be persons suited to the task and to one another. It is more difficult for a team to accept consulting work than for an individual.

2. A request for services was always passed along to the coorditor and the Decision-Making Task Force. A field team was then built to meet the needs of the client, of the individuals on the team, and of the cadre as a whole. In a clear sense, the cadre as a whole "delegated" its consulting work to sub-teams of itself. These sub-teams were strongly conscious that they had to answer demands from two sources: the client and the cadre.

3. They nearly always went out for at least half a day at a time -- more often two or three days at a time -- not just an hour (and of course they did not merely give talks). Teams were out on six different

occasions in 1970-71, four in 1971-72, and four in 1972-73. This was done in addition to all the work within the Kent schools and district that we described in Chapter 11.

4. They went into organizations and tasks considerably different from those back home: poverty-stricken adults, a Model Cities Council, a Community Committee on Child Care, the administrators of a strife-torn urban school district, and the like.

It is true that individuals exist in many school districts -- especially in larger ones -- whose activities range as far as the most active cadre member and farther. We claim, however, that it is not easy to find a group of 24-or-so showing a record as active as this, with the consulting performed in teams, done in a kind of work that was the smallest part of their regular jobs, and maintained over five years.

Self-Renewal

We explained in Chapter 2 some of the ways through which the Kent cadre coordinated its activities and maintained its cohesiveness. We explained the rationale for these activities in Chapter 4. In this Chapter, we shall continue as in the previous section, listing actual instances where the cadre coordinated its activities and strengthened its cohesiveness.

Much of the work of any group whose work is complex and non-routine gets done in meetings. The Kent cadre was no exception. Sub-teams met to plan, conduct, and debrief consulting projects; these were the direct "productive" activities. In addition, the cadre used two kinds of meetings for management and maintenance. The entire body met periodically. The executive group that was first called the Steering Committee and later the Decision-Making Task Force met frequently -- and at 6:30 a.m.! The two types of gatherings rather quickly took on distinctive functions. The Decision-Making Task Force received and negotiated jobs of work and brought information in from outside. The meetings of the entire group were used most often for learning new skills or refreshing old ones, and for renewing the group solidarity. During the more stressful periods of the cadre's existence, some of the meetings of the entire group were also used for sequences of problem solving in the search for solutions to their troubles.

In this section, we shall concentrate on the wasy the cadre used its own organization to bring new knowledge and skills into itself. We list below all the "self-renewing" or "group building" meetings of the entire group of which we have record, with brief notes about agenda. We also include a few other closely related activities that aided self-renewal and the search for new information or skill.

Note about lists of the cadre's activities. We have already set out one long list of the cadre's activities, and we are about to set out another; we shall present four in all. Some readers may prefer to skip the lists, reading only our interpretation of them. We offer the lists to give realistic flavor for those who wish to dip into them. Furthermore, we think it only respectful of the reader's intelligence to give at least these lists, long in items but very brief in each item, so that the reader can see the kind of evidence on which we base our estimation of the cadre's performance. Finally, instead of putting these lists in appendices, we thought it better to leave them where the eye, even running quickly past the items, could take an easy measure of the vigor and enterprise of the Kent cadre.*

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*The activities of the cadre recounted in Chapter 11 are not repeated here.

We turn now to the "self-renewal meetings" of the cadre and some closely related activities through which it used its own organizational norms and resources to strengthen its own capacities.

12-13 December 1969. Meeting of cadre for renewing group solidarity and refurbishing coordination. Runkel and Schmuck of CASEA were facilitators. Part of their report read as follows:

> Much of Friday evening was used in talking about the problems brought on by the recent budget trouble. Dyads and triads combined into three groups to formulate problems more precisely. On Saturday morning, there was a general return to interpersonal problems among cadre members.
>
> The crisis in the district (they said) pervades our conference. Furthermore, physical distance makes it difficult for us to communicate rapidly. When composing sub-teams for interventions we must consider the personal acceptability of members. Will staff resent being asked to give extra time when their hours are already being over-claimed by budgetary stresses? Should we revise priorities?
>
> The agenda became:
>
> How does one get out of the cadre? Can there be a state of limbo?
> How does one get into the cadre?
> Do sub-teams have reason to continue their interventions?
> Which teams are not now actually working?
> How can we improve the communication among the coordinator, the Steering Committee, and the rest of the cadre?
> How should we determine the membership of the Steering Committee?

10 August 1970. The cadre began its own library with "Organizational Training for a School Faculty" by Schmuck and Runkel.

24 October 1970. Meeting of entire cadre for renewing group solidarity and refurbishing coordination. Don Murray of WEA was facilitator. Included reports on recent work, exercises in group process, planning and problem-solving sessions, and a lecture on theory. Don Murray conducted a few short follow-up sessions later in the school year; our records give us no details about them.

27 May 1971. Meeting of entire cadre "to discuss status of the group at this time and where it is going." Ideas for future activities were generated. Consensus seemed to be that "the group feels it has a tremendous service potential, but it needs a boost from funding support, etc." No facilitator from outside was employed.

5 February 1972. Meeting of entire cadre for a self-renewal session to formulate goals, clarify expectations, choose maintenance tasks and projects, and plan budget. Maury Pettit of Central Washington State College was facilitator.

8-9 September 1972. Meeting of entire cadre for a self-renewal session on interpersonal blocks and goals for the future. Runkel and Murray of CASEA were facilitators. They reported:

> During debriefing, most participants said they felt much more committed to the group; some said this was the most productive workshop they had experienced.
>
> In our opinion, the workshop was exciting and stimulating. They were very receptive to giving one another feedback, and ready to proceed with work toward new goals. They showed great maturity and adaptability as an organization.

30 October 1972. Meeting of entire cadre to clarify the balance between goals and resources. Maury Pettit was facilitator.

3 January 1973. Meeting of entire cadre to refurbish and improve skills of old and new cadre members. One of the original cadre members taught the group the STP problem-solving method. No outside facilitator was employed.

1 February 1973. The Decision-Making Task Force (DMTF) announced the following additions to the cadre's library:

Watson. "Change in School Systems."
Rainman and Lippitt. "Team Training for Community Change."
Albertson and Hannan. "20 Exercises for the Classroom."
Runkel. "Activities Initiated by Kent Cadre Since February 1970."

10-11 March 1973. The DMTF announced a workshop for those who wished to attend on "Fundamentals of Organizational Development."

May 1973. Two cadre members went to the Office of the State Superintendent of Public Instruction to pick up materials that could be useful to the cadre.

May 1973. A cadre member circulated a questionnaire to ascertain interest of cadre members in attending human relations training at Bethel that summer; one member attended.

7-8 September 1973. Meeting of the entire cadre for "team building." Twenty cadre members attended. John Goff and Bob McGlone were facilitators. Included exercises, lecture, and planning.

10 September 1973. The coordinator circulated copies of an article: "OD Techniques and Their Results in 23 Organizations: The Michigan ICL Study."

2 October 1973. The DMTF announced that a workshop on Transactional Analysis (not initiated by the cadre) would be held on 12 October and that a letter would be circulated about it. They announced, too, that they had subscribed for the Journal of Applied Behavioral Science for the Cadre's use and that a pamphlet had been added to the library:

Arends, Phelps, and Schmuck. "Organizational Development -- Building Human Systems in Schools."

14 November 1973. The DMTF announced new additions to the library:

Runkel. "Effects of Training for OD on Certain Distinctive Patterns of Innovation Over a Four-Year Period by the Elementary Schools of Two Districts."
Wyant. "Some Organizational Patterns in Certain Elementary Schools."

8 June 1974. Meeting of entire cadre for self-renewal. Coordinator reported it as "highly successful and forward-looking." This meeting had originally been scheduled for May but had to be postponed for reasons we do not know. Facilitator was Don Murray of WEA.

2 July 1974. Coordinator announced additions to the library:

CASEA. Slide show on organization development.
McGill and Horton. "Action Research Designs for Training and Development."
Schmuck and Schmuck. "A Humanistic Psychology of Education."
Van Maanen. "The Process of Program Evaluation: A Guide for Managers."

8 October 1974. Meeting of entire cadre for "training session and goal-setting meeting." Chief topic of the goal-setting part was how to maintain the cadre's work with no budget from the school district. No facilitator from outside was employed. Another meeting was scheduled for 17 October; we do not have any record of whether that later meeting occurred.

Of course, not all the meetings and activities described above were devoted entirely to increasing the knowledge and skill of the cadre. Some included the function of "retention;" that is, establishing regularized procedures. Some included the function of "selection:" that is, selecting from all available ideas those that seemed best to retain. The last meeting listed above (8 October 1974) for example, had two parts. The first part was devoted to renewal of the group's skills and solidarity -- increasing the group's available variety through bringing in new skills and through increasing the ability of the group to marshal its own internal resources. The second part was devoted to selection and retention functions -- considering the kinds of work that could be adopted and the procedures that could be used to carry out the work, and then settling upon some procedures to be made routine. Conversely, later when we list the activities of the cadre that seemed to concentrate on the selection and retention function, we shall find that some of them included some variety-seeking. We have classified the items in these lists according to our best judgment of the chief thrust of the activities in each instance.

Stresses from the district-environment of the cadre often brought the cadre more "enforced variety" than they would have preferred. The meeting in December 1969 was precipitated by the onset of the budget crisis. After the new superintendent arrived at the beginning of 1971-72, there was a period of relatively low activity with clients while the cadre explored its status under the new administration. As we saw in Chapter 11, the new superintendent made use of the cadre for his "communication seminars" and for meetings with the citizenry. Work with schools, however, dropped during this period. Later, work with clients picked up, but the struggle to achieve official legitimization from the new superintendent continued. The increased frequency of meetings after 1971-72 reflects this struggle.

The list above shows that the cadre continually and deliberately engaged in activities to increase its skill by bringing in ideas, persons, and written materials that were not previously available in the group. The question arises whether these self-renewal activities of the cadre were distinctive. Doesn't every group in every school district have planning meetings, parties, and the like? Doesn't every district have a library for its professional staff? We think the sessions of the cadre differed from most group sessions in school districts in the following ways.

1. The cadre initiated its own self-improvement. It is true that most school districts offer or require training sessions intended to improve the work. Sessions on management by objectives, new curricular methods, testing techniques, and other sorts of in-service training are common. In most instances, however, the training is put upon school people by those above them in the administrative hierarchy, and usually without attention to the immediate needs felt by the people required (or "urged") to attend. The cadre determined its own needs, recruited its own outside consultants, and usually helped design its own training. This fact heightened commitment, readiness to learn, and the readiness of cadre members to apply their learning. It seems significant that the

cadre members were only treating themselves the way they treated their clients. They were practicing what they preached.

2. The new learning was directed to group functioning, not to individual functioning. The training sessions for the cadre were always devoted to skills to be exercised in teams, not by individuals.

It is true that most school districts encourage staff to enroll for in-service training, to attend summer school at a university, to travel to foreign lands, and the like. These sallies are almost invariably taken by individuals, however, and the rewards are reaped individually. In-service training and summer courses are almost never geared to improve the competence of a group. Instead, the participant hopes, individually, to gain an increase in salary (while others may not) or a better job elsewhere (leaving others behind).

When cadre members learned new skills, they customarily practiced them together and carried them into the field in teams, not as individuals. When they contracted for new training or re-training, they did so to improve the efficacy of the cadre, not to offer individuals a better chance to get a raise in salary or to get a better job elsewhere. Even when a cadre member went off individually for training elsewhere or to consult outside the district, he or she always brought the experience back to the group and never held it private. In brief, the cadre functioned as a collaborative, cohesive subsystem, not as a collection of individuals with individual duties. This fact heightened mutual support, both emotional and technical. It reduced harmful competition within the group. It increased the flexibility of the cadre in assigning members to sub-teams. The very practice of this highly interdependent mode of functioning continually refreshed the cadre's ability to draw easily and quickly upon its members' personal resources.

3. Training sessions were not lectures, but practice. Lecturing and reading were used to illuminate practice, but practical skill was always the thing emphasized. Any consultant from outside always had to answer the demand, "All right, that sounds good. Now can you show us how to do it?"

4. The cadre dealt constantly with interpersonal relations among themselves. Their strong collaborative teamwork demanded high levels of trust and confidence in one another. If someone failed to do his or her part, others could not take refuge in the claim they had done their duty and leave the weaker member to be cast out by some superior. The weaker person became an operating problem for all of them. Sometimes, it is true, someone acquired skill too slowly and withdrew from the cadre or was invited to withdraw. Most of the time, however, such a matter was openly discussed and treated as a problem of how to enable the person to be a stronger member of teams in the future. The solution of the problem always, of course, required airing feelings about how the stronger members acted in the team as well as how the weaker member acted. It required airing distrusts in both directions. These sessions were not easy; they were fraught with emotion. But the cadre faced them and dealt with them. In brief, they showed the capacity for communicating under emotion that we discussed on the part of schools in Chapters 5 and 7. Interpersonal snags and antipathies underlie many of the break-downs in coordination that sooner or later come upon every group in schools or other

organizations. We believe that the cadre dealt with these snags at greater depth and more effectively than most work groups do.

5. The cadre remained alert to the desires and standards of its clients. Many commercial organizations try to learn the desires and standards of quality held by their customers, but this attitude seems to be rare among educators. In our experience, school people are wont to decide whether a certain mode of operation is "good" without any checking whatsoever with students, parents, labor unions, civil rights groups, churches, or others who have a vital stake in what the school does. The cadre, in contrast, ventured upon projects only when requested. They then undertook diagnosis to be sure they were tailoring their intervention to the problem of the school, administrative group, or whoever the client might be. As the intervention proceeded and afterward, they checked to ascertain whether the client felt the problem was being alleviated. This attitude pervaded the cadre's self-renewal sessions also. Their search for increased potential and their selection of modes of working were always responsive to the needs clients had expressed.

To sum up, we believe that the ventures of the cadre outside their own community and their self-conscious sessions for self-renewal give evidence of the third-level skill of variety-seeking in a degree well above the average in most schools and districts.

Selection

We cannot offer any separate evidence of the ability of the Kent cadre in making *selections* from its internal and external variety.

Selection requires subsystems in the organization to become aware of potential variety, to test possible adaptations, to make modifications, and to decide whether to make the new thing a regular thing to be retained in the organization. All of these phases overlap in action either with variety-seeking, with retention, or both. The crucial moments in selection usually come during planning sessions or problem-solving sessions when people are discussing the ideas worth saving and the ideas to be jettisoned. We have no records that detailed. In the next section, however, it will be clear by implication that the Kent cadre spent a good deal of time considering what they should retain from the plethora of possibilities they encountered.

Retention

As a part of the initial training we gave the cadre in the summer of 1969, we provided them with a certain amount of structure and regularized procedure. They began the school year with a coordinator, a steering committee, and a list of active members. The district provided them with a budget of about $8000. The chief guides for their work were (1) to assign team members to work with schools and other subsystems in which they were not themselves employees; (2) to work always in teams, not as individuals; (3) to mount demonstrations of their services; (4) to deal in process, not content; and the other rules we laid out in the section on "Rules for the Cadre" in Chapter 4.

The process of selecting structures and methods of work continued to be a constant concern of the cadre, as the lists of activities below will demonstrate. We shall present three lists: (1) activities and policies for replenishing the cadre's membership, (2) the courses of instruction in communication and group process that demonstrated the cadre's wares to the district and served as sources for recruiting new members, and (3) the meetings for managing the work and for searching for better structures and policies through which the cadre sought to maintain their existence and assure their stability.

Replenishing the Membership

The first need of any system is to maintain its physical body -- the existence need we discussed in Chapter 3. The cadre initiated activities to answer this need from the very beginning. We list below the activities and procedures through which the cadre struggled to regularize the recruiting, training, maintaining, and retiring of its membership.

Spring 1970. Within six or seven months after its founding, the cadre had proposed several ways in which people might participate in the work of the cadre. This list was an adaptation to the different amounts and kinds of work people felt they could contribute:

As a participant in interventions.
As a Steering Committee representative.
As a course instructor.
As a practicing communicator, but not as a regular member of the cadre.
As an occasional observer to a group.

10 August 1970. By this time, the Cadre had worked out a set of principles governing membership. These included the way members should be apportioned among their regular jobs in schools or central-office department, personal characteristics applicants should exhibit, the manner in which the selction committee should proceed, and the procedures for withdrawing from the cadre. The "personal characteristics" section included these points:

Applicant should have expressed clear interest and knowledge about the cadre's work.

Applicant should submit explicit letters of recommendation from supervisor, instructor in a cadre course.

Applicant should display interpersonal competency, emotional stability, low level of devensiveness, competency in present job, and competency in community relationships.

24 October 1970. Six new members had been added by this time. Others were added by May 1971, and more by February 1972; our records are confusing about the numbers.

Mid-year 1971-72. The steering committee was again considering problems of getting in and out of the cadre. Its suggestions were:

Applicants to the cadre should have acquired skill equivalent to that given by the cadre's courses I, II, and III or to a course on organizational development.

Applicants should fill out an application.

One of the first acts of a new cadre member might be to go through some exercises in self-assessment to provide information for the talent bank.

The new member might come in as an apprentice or as a full member.

The cadre should make sure apprentices obtain sufficient support and assistance.

In the past we have had some members with emotional problems. How can we protect these individuals and the group? We should make it easy for individuals to get out gracefully when they discover they and the role are not compatible.

28 November 1972. The Decision-Making Task Force (DMTF) met with new cadre members. Meeting included get-acquainted exercises, narration of cadre history, discussions of present and future work, some training exercises, and filling out cards concerning training, experience, and preferences for future kinds of work.

5 December 1972. DMTF discussed training of old and new cadre.

7 March 1973. Members of cadre conducted training for new members. Chief topic: "When to Intervene as a Facilitator During a Discussion." Meeting also included narration of history of cadre and discussion of present and future functioning.

15 May 1973. Still the cadre was dissatisfied with its methods of recruiting, admitting, supporting, and releasing members. The DMTF appointed a special task force to study the matter.

Summer 1973. The DMTF sent questionnaires to all presumed members asking to what extent and in what ways they wished to continue participating in the cadre's work and asking them to write down their training, experience, and preferences.

2 July 1974. In his annual report of this date, the coordinator said that the goal of establishing clear and workable criteria for membership had still not been attained.

As the 1974-75 school year opened, the district for the first time did not provide the cadre with any money at all. Thus the first item below.

12 September 1974. The coordinator reported to the membership that the DMTF was "seriously considering a membership fee."

12 September 1974. In the same memo, the coordinator announced a workshop for those "members who wish to continue membership. Attendance is absolutely necessary."

Even within the process of replacing its membership, the cadre exhibited its attention to variety. The first entry in our list shows the cadre trying to avoid a simple and stereotyped role for its members. Similarly, the cadre opened its ranks to non-certificated staff in the school district, and at one point had as a member a citizen who was not an employee of the school district.

Repeatedly, however, the cadre was frustrated in trying to specify workable procedures for admission and for determing acceptable participation. The reasons are not far to seek. The cadre could not accept mere nominal membership; inactive people were a threat to its responsiveness and to its morale. At the same time, members wanted to make use of any help or resource anyone offered, even if it was small or infrequent. Moreover, the orientation of the cadre toward new members struggling to become skilled was nurturing, patient, and supportive. It was not pass or fail, sink or swim. Consequently, when a decision had to be made that the progress of a new member was too slow to justify the continued effort to help him or her, the necessity of saying an enforced goodbye was very painful. As the coordinator said at one point, "no cruel confrontations wanted".

At the same time, the cadre amply demonstrated, no matter how painful some of the processes were, that they did recruit and induct new members, increase the skills of the new members, and put them to work. The process continued through the last of our records.

It is not surprising, of course, that a continuing organization replenishes its membership; it could not continue if it did not. But many organizational innovations in schools and districts founder at this very stage. After the people leave who were originally trained by the outside consultants, others find themselves incapable of carrying on. Perhaps those originally trained to operate the new methods or the new structure neglect to train successors. Or perhaps they try but are unable. In any case, the Kent cadre managed from 1969 until this writing to attract new members, screen them, induct them, train them, and turn them loose in the field. Subsequently the new members were able to do the same with the next generation of new members.

It is also important to note that the transmission of skill from one generation of the Kent cadre to the next was not merely a matter of preserving and passing on what we of CASEA had taught them.

If this had been their attitude, we do not think they would have been successful in passing on their skills. Instead, the cadre was always alert to bring in new ideas and practices to improve their skills; new members were recruited to this effort as part of their socialization. They were not preserving a heritage; they were forever building their group and their skills anew.

Courses

During their initial training, the Kent cadre themselves conceived of the idea of offering courses in interpersonal communication. To do so, they believed, would display their wares to the district in a tangible form, provide an avenue through which new members could be recruited, and enlist understanding and support (if they taught well) in many parts of the district. They were correct on every count, despite Runkel's initial doubts. After the success of Phase I of the courses they offered, they developed two more advanced courses, with Phase III intended to be enough of a practicum in organizational development to qualify the graduate for full membership in the cadre.

Ron Martell of CASEA reported the first meeting of the first Phase I course as follows:

> The class began at 7:00 p.m. on 18 November 1969 with an enrollment of 31.
>
> A cross-section of Kent people compose the class. It includes an assistant superintendent, an applicant for the cadre, members of the Citizens' Advisory Group, about six teachers from a single elementary school, a counselor from a junior high school and others.
>
> After the leader gave an introduction, he divided participants into three cross-sectional groups. People who usually work together will be put together for consensus exercises and practice in problem solving, but they will be split up to learn communication skills. Two cadre team members worked with each of the

three groups.

The group I was with was enthusiastic and worked well. The total class reconvened for the last fifteen minutes to give the leaders feedback. Apparently all groups went well; most comments were favorable. The class disbanded at 10 p.m. The leaders debriefed until 11 p.m.

Phase I continued with practice in basic interpersonal communicative skills, use of resources in a group, and a brief introduction to group problem solving. The course occupied four meetings of three hours each.

Phase II of the cadre's courses ran for 30 hours. It reviewed basic communicative skills and then went on to expectations in groups, feedback, the interpersonal gap, the effects of emotions, matching behavior with intentions, and task maintenance. This course was first offered in the fall of 1970, from 22 October to 21 November.

Phase III in organizational development was offered twice. In the spring of 1973, it required 30 hours in attendance and ran from 27 April to 12 May. The four main topics were: (1) the individual and the organization, (2) the concept of development, (3) change agentry, and (4) reviewing OD literature.

In all, courses were offered by the cadre as follows:

	Phase I	Phase II	Phase III
1969-70	Winter Spring	Spring	
1970-71	Spring	Fall Spring	Spring
1972-73	Fall	Spring	Spring
1973-74	Spring	Spring	

These courses always carried academic credit with a nearby college or university. Sometimes an academic from outside the Kent district was the leader of the course. Don Schliesman of Central Washington State College led Phase I in fall 1972; John Hoff of Seattle University led Phase III in spring 1973. In the beginning, the district granted credit toward salary increases for attending these courses, but with the new superintendent the credit authorization was lost.

All in all, the cadre's goals for the courses seemed well achieved. People continued to enroll for the classes as the years went by -- teachers, counselors, administrators, secretaries, parents, ministers, skeptics, and romantics — even at tuition as high as $50. Most of the new members of the cadre came out of these classes. Many of the schools or departments that became the cadre's clients contained persons who had been through these courses. In sum, the cadre did not wait for applicants to show up at their doorstep. They put thought, energy, and a great number of hours into demonstrating their wares and seeking candidates among those who were attracted.

Organizing

Organizations often retain a new way of doing things (or try to) by giving the new function to a new organizational sub-structure. A new sub-structure is often the most visible aspect of retention. We of CASEA gave the Kent cadre its original structure. For instance, we drew its members part-time from positions throughout the district and admonished the cadre to continue that mode. They did. We helped them establish a steering committee during their intiial training. They eventually found that structure not to their liking, and established a new sort of coordinating body that they called the Decision-Making Task Force in the fall of 1972.

Structure also includes assigning tasks and clarifying roles. An important factor in stabilizing task and role is maintaining legitimization from hierarchical superiors. Structure is also stabilized by disposable money -- a budget. In these latter features of structure, the cadre never reached the stability they wished. The list below displays the efforts of the cadre to become a legitimized and routinized part of the Kent district.

8 July 1969. The Kent cadre was given official existence by an article that appeared in the house organ of the district called "Today." The article, approved by the superintendent, told the structure, duties, and hopes of the cadre. It mentioned that they would be supported with some money.

8 September 1969. The superintendent reinforced the article in "Today with a personal memorandum to cabinet members, principals, and department chairmen. It repeated briefly the purposes of the cadre. It ended:

> This project is one that should receive high priority this year. This will mean that occasionally some cadre members who are members of your staff will find it necessary to attend meetings that may be an inconvenience to you and to them. Please assist the project by allowing them to attend those meetings on school time that are necessary.

The budget for 1969-70 was set at about $8000.

24 November 1969. The cadre issued written job descriptions for themselves and their coordinator and listed procedures for selecting new members.

The district's budget crisis erupted in December 1969. This crisis is described in Chapter 2.

12 February 1970. Trouble with the budget was already arising. The president of the Kent Education Association (KEA) wrote to Runkel:

> The superintendent issued his staffing plan for next year.... He recommended a full time posi-

tion for the coordinator.

> . . . KEA board said that all coordinators paid with district funds should be half time, except two. In the coordinator's case, if he must be cut to half time, then it was felt he should concentrate his efforts on Language Arts and Reading.... There went cadre coordination.

27 May 1970. The Steering Committee congratulated the cadre "for a very fine year despite some severe handicaps."

According to our memory of news conveyed to us informally from time to time, the Steering Committee met many more times during its three-year existence than our records show.

July 1970. The cadre selected a new coordinator -- its second. Blondino left for a job with the Office of the State Superintendent of Public Instruction.

10 August 1970. By this time, the cadre had developed a file of intervention designs, a way of sharing plans for interventions, a procedure for approving projects, a file of evaluations, a procedure for rotating membership on the Steering Committee, a specification of different roles within the cadre, and a library.

Budget for 1970-71 was about $7200.

Fall 1970. The cadre and the superintendent sent letters of appreciation for CASEA's work to the U.S. Office of Education and to Congressional representatives and senators.

17 December 1970. The Steering Committee held a long conference with the superintendent about their role in the district.

The new superintendent arrived for the 1971-72 year. The old superintendent became Deputy Superintendent and was given supervision of the cadre as one of his duties. The budget for 1971-72 was uncertain. The status of the cadre seemed to be "official but unfunded." There seems to have been some money for the cadre, but our records do not show how much or how it was allocated. Our records do show that there was no released-time money for cadre members or the coordinator. Their released time had to be paid from funds allocated to schools who wished to employ the cadre's services.

17 September 1971. The coordinator circulated a memo asking members to volunteer for various kinds of work. She also called attention to Wyant's (published later in 1972) study of their progress.

September 1971. The cadre selected its third coordinator.

16 April 1972. Steering Committee met. Set goals and budget for 1972-73.

5 June 1972. Steering Committee met. About a dozen other cadre members attended. Some items from their report follow.

> A good share of the budget will go for classes in communication.
>
> What happened to PETC II? Crowded agenda, limited budget, timing, slips in communication all contributed to its failure. We hope our in-service training will be better planned next year.
>
> Discussed changing our name.
>
> The consensus was that we had an excellent year, especially our performance with the Superintendent's Seminar. The end-of-year evaluation sheets were very favorable.

(See the section on "District-Wide Communications" in Chapter 2 for a description of the Superintendent's Seminar.)

The budget for 1972-73 was about $6000. The old superintendent, who had been acting as Deputy Superintendent, left for a job with the Office of the State Superintendent of Public Instruction. The cadre was placed under the supervision of the Assistant Superintendent for Employee, Pupil and Public Relations, who was an ex-member of the cadre.

18 October 1972. The cadre replaced the Steering Committee with a four-person Decision-Making Task Force elected by the cadre membership. The coordinator always

met with this four-person DMTF.

14 November 1972. DMTF met. Heard about the meeting of organizational specialists from the Pacific Northwest hosted by the cadre earlier in November.

28 November 1972. DMTF met with applicants for membership in the cadre.

5 December 1972. DMTF met. Heard reports of work being done.

10 January 1973. DMTF met. Heard report on the training that had been conducted for old and new members of the cadre on 3 January. The picture of the cadre that members had produced at that session was (1) the cadre has no clear objective, (2) it lacks formal organization, and (3) it has a weak image.

7 February 1973. DMTF met. Heard reports of success of Phase I and II courses and heard about planning for Phase III. Discussed budget.

12 February 1973. DMTF met. Discussed budget and a self-renewal workshop for spring.

28 February 1973. DMTF met.

March 1973. The DMTF apparently sensed some disgruntlement among the cadre, and the coordinator sent out the following memo:

> DECISIONS! DECISIONS! DECISIONS! DECISIONS!
>
> The frustration level of some of our cadre has reached a point where a bit of flack is flying around aimlessly. I hope we can reduce the level to a point of tolerance. In brief, this is the rationale for decisions.
>
> 1. At the close of last year's cadre activities, it was decided to establish a Decision Making Task Force to streamline and create a more effective operation. We had found that trying to arrange meetings of the entire cadre on a volunteer basis was inadequate and unworkable.
>
> 2. The present task force meets on a monthly basis or as often as the need arises, for 6:30 breakfast meetings at the Blue Candle. This

group represents a broad scope of professional interest and, in general, the district area geographically.

3. The notices of meeting are established well in advance unless an emergency occurs. Meetings are open to anyone interested. The agenda is established before the meeting. At no time is anyone deprived from getting ideas on the agenda. We welcome them, in fact.

$64 DOLLAR QUESTION: HOW ARE CADRE MEMBERS SELECTED TO PARTICIPATE IN INTERVENTIONS OR WORKSHOPS?

ANSWER: They were selected by individual or individuals responsible for the workshop or intervention who request assistance.

I hope at our April 6th and 7th workshop we will resolve some of these questions and we will be able to live happily ever after!

Mid-March 1973. The DMTF met. They appointed a Task Force on Structure for the Cadre. This was done partly as a result of a request from the superintendent for up-dated job descriptions in the cadre.

26 April 1973. DMTF met.

15 May 1973. DMTF met. The Task Force on Structure of the Cadre reported its estimation of the situation, which it had written after interviewing eighteen cadre members. After discussion, the Task Force was assigned to develop the budget for 1973-74. Here are excerpts from the report of the Task Force:

DISSOCIATION FROM THE DISTRICT. The Assistant Superintendent reports that a consultant cannot be hired as such to work in the district if he or she is already under contract with the district. Recommendation: Stay in the district

COORDINATOR. Everyone wants him or her paid. Recommendation: Released time and pay for the coordinator should be first priority and the aim of a long-term campaign for next year's budget.

DECISION-MAKING TASK FORCE. Almost everyone felt this body should be elected by the membership, with some rotating features. Recommendations: Write a job description for this position.

SELECTING CONSULTANTS FOR PROJECTS. No clear-cut direction came from the interviews. Some of our present methods are contrary to the best organizational practices. In any case, surely clients should have something to say about who should be their consultants. Recommendation: Appoint a task force to write a policy statement to be approved by the membership. Also have it reviewed by an outside organizational consultant.

MEMBERSHIP. Everybody agreed that something should be done immediately. Recommendation: Appoint a task force to draw up a list of performance criteria for membership and review the job description of members of the cadre. All of the people who have expressed an interest or taken a class should be considered candidates. There should be a Membership Task Force who should Counsel them and recommend them for interning for full membership. Under present conditions, however, if they consider themselves as qualified for full membership, they should furnish specific data in writing by May 25. The DMTF should make a final decision by the time school is out and notify the candidates by June 15.

BUDGET. Everybody says the coordinator should sign everything, and the DMTF should prepare the budget. Recommendation: Same.

CADRE MEETINGS. Answers varied from monthly to none, but 80 percent said three or four meetings a year, for training, task, and maintenance. Everybody said there needs to be more training yearly. Recommendation: A minimum of three meetings next year.

Budget for 1973-74 was about $8000.

Summer 1973. The cadre selected its fourth coordinator.

July 1973. The new coordinator mailed a letter to all administrators in the Kent district. It told about the work of the cadre and solicited business. After receiving some replies, the coordinator reported: "Indications are that some of our administrators are unaware of what we can do or what we have done and are interested in learning more about us. Yea for our side!"

10 August 1973. In a memorandum to the cadre, the coordinator said, "In the eyes of most of the cadre I have talked with, 1972-73 was by far our most successful year. With a larger cadre and with additional skills and knowledge, we have the potential for an even greater year."

9 September 1973. The cadre elected a new DMTF by secret ballot.

17 September 1973. A member of CASEA interviewed the coordinator and reported:

> The major task for the coming year is to acquire legitimacy within the district; this seems to be a perennial concern. The cadre does have a budget of about $8000, including about $750 for the coordinator's part-time salry. The second major task of the coordinator is to introduce more organization into the operation -- better record-keeping and internal procedures. Membership is a problem. They have 25 to 30 members, but it is hard to say who is in and who is out. The cadre will probably evolve some sort of apprenticeship, but the coordinator is caught in the dilemma of assigning new members to field projects to give them experience versus assigning persons strictly on the basis of the client's needs.
>
> The coordinator is very optimistic about the coming year. His optimism is based on the recruitment of new members, the success of the workshop with John Hoff (which gave both old and new members some new skills), and his own determination to introduce more organization, theory, and research into the cadre's operations.
>
> Unfortunately, the coordinator has received no reply to his letter of solicitation from the superintendent. The political climate in the district has changed in response to the conservatism of the community, so that "innovative" is now nearly as taboo as "sensitivity training." The superintendent has proclaimed that the district will no longer be a leader in seeking out innovation, but will rely more on the efforts of other districts to develop and test new things. This seems to be a protective stance to conform to community desires.

24 October 1973. DMTF met. Discussed budget, communication between the DMTF and the rest of the cadre, writing articles for public relations, a social gathering

on 12 December, and the upcoming election of a new DMTF.

14 November 1973. DMTF met. Discussed budget.

28 November 1973. DMTF met. Discussed the need for a code of ethics, and appointed a task force to develop guidelines for evaluating the cadre's work.

4 December 1973. The coordinator distributed the new job descriptions that were being submitted to the district administration.

21 December 1973. The coordinator announced the mid-year election of the DMTF.

21 December 1973. DMTF met. Approved the budget.

9 January 1974. DMTF met. Received reports. Considered a spring self-renewal session.

23 January 1974. DMTF met.

2 July 1974. In his annual report, the coordinator said:

> The code of ethics had been drafted but had not yet been reviewed by cadre members. Progress had been made on developing methods to evaluate the cadre's efficacy. Two potluck social gatherings had been held.

For 1974-75, the district allocated no money to the cadre. The only material support from the district was part-time service from a secretary.

12 September 1974. The coordinator announced in a memorandum that he had moved to a job in a neighboring school district, but "since the cadre has no formal contract with the Kent district," he would stay on as coordinator.

29 June 1975. In a conversation with Runkel, the coordinator reported that though about 25 persons had been active in the cadre in 1973-74, the number during 1974-75 was about fourteen. The DMTF had functioned during 1974-75 as well as ever, but it had been difficult to get many members to appear for self-renewal meetings. More than once, an outside consultant had found himself with about half the expected number. Outside consultants during the year were

> Maury Pettit, Chuck Blondino, and Don Murray of WEA.
>
> The coordinator thought it possible that the Kent cadre would not exist in 1975-76.

It seems clear that the existence needs of the cadre, as a group, were under threat almost from the beginning -- from December 1969, to be exact, when the budget crisis erupted and most people were unsure about the future of their jobs, not to speak of "frills" such as the cadre of organizational specialists. Under these repeated stresses, however, the cadre did not cling desperately to old ways of doing things; on the contrary, they examined their own internal resources and gathered more information about their environment. They changed the nature of their clientele in 1971-72 when the new superintendent issued his challenge to their usefulness (see Chapters 2 and 11). They reexamined their clientele, too, as the budget became uncertain in 1971-72 while they were on trial. Since some members of the cadre had been receiving more invitations to consult outside the district than they could accept, the cadre spent several meetings discussing whether they should incorporate and offer their services to the Kent district simply as one of many customers; the last meeting at which the matter was formally considered appears in the list above at 15 May 1973. Finally, they altered their management structure in the fall of 1972 when they established the Decision-Making Task Force.

Let us review the more obvious points of special stress in the life of the Kent cadre. Here is the list:

August 1969. Cadre begins its work with clients.

December 1969. District's budget crisis erupts.

March 1970. CASEA withdraws.

Summer 1970. Cadre's second coordinator takes office.

Summer 1971. Cadre's third coordinator takes office.

September 1971. New superintendent takes office. Budget becomes contingent upon cadre immediately demonstrating its efficacy to the new superintendent.

September 1972. Old superintendent, who had been Deputy Superintendent for the past year and who had continued to lend support to the cadre, leaves.

October 1972. DMTF established.

September 1973. Cadre's fourth coordinator takes office.

September 1974. District ends all budgetary support.

All new substructures in schools and districts must negotiate a number of hurdles if they are to survive. The Kent cadre had more than its share.

Many new organizational arrangements and sub-structures fail to float when they are launched. They fail to do even the first things their designers hope for. Of those that do stay afloat and set a course, many fall dead in the water, with sails flapping, when their original outside helpers -- CASEA, in this case -- take the pilot's boat home. Some crews survive being left on their own; they manage to keep their own sails in trim. But when the original crew begins to depart and the sub-structure must replace them, many remain tied to the pier because recruits cannot be found or because the old crew seems somehow unable to teach the new crew the ropes. The crews of others give up and go back to the home port when their first captain leaves. Still other sub-structures founder on budgetary shoals. And of those that successfully negotiate all these hazards, many go under when a key administrator is changed -- the principal or the superintendent.

As we write, the Kent cadre of organizational specialists has met all these hazards, some more than once, and is still serving clients competently. It may turn out as the current coordinator predicts -- the Kent cadre may no longer exist in 1975-76. However, earlier coordinators were also upon occasion pessimistic about the cadre's future, but it nevertheless somehow found a way to continue its existence. We can only wait and see.

Apparently, the greatest hindrance that happened to the cadre was the change of superintendents and the events that followed. The first event was the outspoken challenge the new superintendent issued. The cadre negotiated that successfully through its assistance to the Superintendent's Seminar and the meetings with citizenry. The next event -- or lack of one -- was the lack of explicit and reiterated support from the superintendent or any of his assistants. It is true that the new superintendent made one clearly supportive statement in Today when the cadre first showed its ability to help him with meetings (see Chapters 2 and 11 for description). But our records show no public approbation thereafter. This was a strong contrast to the firm support given by the previous superintendent. The third event, of course, was the loss of all monetary support in September of 1974. These are severe threats; some might even call them punishments. They are the more severe when contrasted to the treatment of the cadre by the old superintendent. We saw in Chapter 11, for example, how the budget crisis of December 1969 -- about as severe a financial loss as can be found in histories of school districts -- did not result in the district's withdrawing funds from the cadre. Instead, the old superintendent made use of the cadre's services to help the district through the crisis. In contrast, when the new superintendent came up against the strong and vocal conservative segment of the citizenry, he seemed ambivalent about the cadre. During 1971-72, he made use of the cadre to help him communicate with the community, yet we have no record of his continuing to use the cadre in that way in later years. It is difficult to believe that he did not find their services useful. His own early statement testifies that they were useful to him, and he provided the cadre a budget in 1972-73 and 1973-74. On balance, however, our informants (see the entry for 17 September in the list above, for example) take the view that the new superintendent came to see the cadre as an example of the kind of radical innovation that the conservative segment of the Kent constituency would reject.

In our view, the Kent cadre weathered a remarkable series of tempests during its six-year voyage, and did so while sailing under four different captains and taking on novice crew members at every port. Whether it can hoist sail for the next leg of the voyage is yet to be seen.

Comparisons with Two Other Change Strategies

We believe we have given evidence in the earlier parts of this chapter that the style of operation of the Kent cadre has been unusual, and so has been its degree of success in comparison with most ordinary subsystems in school districts. But one can still ask whether the Kent cadre has been unusual in comparison to other similar efforts. Wyant (1972, 1973) found accounts in the literature of two other change strategies that were similar to the Kent strategy in three ways: (1) an outside agency and a school district system joined in a lengthy project to improve the system, (2) a subsystem received laboratory training from outside consultants, and (3) the goal was generally to raise the system's ability to do things in new ways. This section will consist of an abridgement and slight revision of Wyant's two papers comparing the three projects.

Internal Teams for Innovation

A project described by Wolfe (1969) was a seventeen-month effort conducted by the Institute of Advanced Studies for Teachers of Disadvantaged Youth. Teams of faculty members in six poverty-area junior high schools were formed to introduce particular innovative practices and to improve the schools' ability to manage change.

The institute staff designed the project and then invited participation by schools in a large Mid-Western city and its suburbs. After the six schools were selected, faculty members in each were invited to apply for team membership. Each team of five or six members was to create a plan for improving its school's innovativeness and then to make the plan work during the 1968-69 school year. The Institute's criteria for team members were: influential position, several years' experience, recommendations from colleagues, evidence of concern for helping disadvantaged youth, personal attributes as judged by the consultants, and academic competence as shown by college transcripts.

The Institute's theory described effective innovative subsystems as groups with (1) "positive" interpersonal norms, interdependence, and commitment to reaching shared goals through problem solving; (2) task competence based on increased individual resources and the team's ability to apply the concepts and skills of action research, system diagnosis, and group problem solving to innovation and change; and (3) effective channels of communication and influence to other individuals and groups in the parent system.

The teams' training was divided into three phases. First, trainees attended a one-week T-group to develop interpersonal skills and team cohesion. Second, they attended the Institute's six-week summer workshop to study minority-group cultures, new uses of audio-visual techniques, and the problems of educating disadvantaged youth. During the workshop, trainees also met with leaders of the school's community, and prepared a documentary film of the community in cooperation with students. Third, each team met with another and with its consultant periodically during the 1968-69 year.

Each team produced a plan, based on diagnosis of the school's problems and its environment, that stated both the needs the team realistically could try to meet and also a set of actions the team intended to carry out to meet these needs. No systematic data were reported on outcomes of the project in Wolfe's study, but his narrative seems to support his conclusion that, while some teams did introduce certain innovations, no team really became a highly effective agent of change.

The most effective team, in a suburban parochial school, built on its members' past experience with innovative programs. However, its efforts to improve faculty communication, to involve parents, and to strengthen student leadership were set aside in mid-year when a financial crisis struck and the staff's energy focused on simply keeping the school open.

At a second school, the team could not resolve interpersonal conflicts, and its impact seemed to be due to the efforts of one dynamic team member. Plans to increase faculty unity, to increase involvement of students and parents, and to improve the curriculum were begun with some success; but the Institute consultants felt that the team's accomplishments fell far short of the school's potential.

At another school, a ghetto school already embarked on several innovative programs, the team seemed to its consultants passive and unambitious. The team never successfully involved other staff members. An orientation program for new teachers was started, but the team failed to carry out its intended collaboration on other projects with an existing faculty planning committee.

At a fourth school, the team was resourceful and committed to change, but could not agree on goals. Efforts to orient new teachers and to improve the school's program of home visitation were started, but departmental chairmen blocked the team's plans to improve inter-departmental communication.

At the fifth school, the team resolved interpersonal issues but limited its ambitions to simply showing its plan to the faculty. It planned to hold a series of workshops on communication, and to help orient new teachers. The team quickly lost two members, and others never joined its efforts; when the school's chronic racial tension intensified, the team lost all its effect.

At the last school, the team could not resolve interpersonal conflicts and soon split into two opposing factions. It had planned to help orient new teachers and to bring parents and teachers together in discussion groups. In mid-year, the school's problems of racial tension, poor staff morale, and student conduct simply overwhelmed the team's efforts.

In summary, no team significantly improved its school's innovative capacity, though some teams effected isolated innovations. The most common difficulties of the team seemed to be (1) a failure to resolve interpersonal conflicts, (2) inattention to organizational restraints on change, (3) inability to manage the process of change, and (4) school situations that required more radical surgery than the teams could provide. We shall discuss these troubles again when we compare the Institute's project with our own and with a second change-agent strategy.

Teams of Change Agents

Goodson and Hagstrom (1971) describe the second project, a two-year planned change effort sponsored by the Research and Development Center for Cognitive Learning at the University of Wisconsin. Teams were created in five school districts to be innovative subsystems that would plan and manage change.

In 1966, the Center invited nearby school districts to participate in a project to test the effectiveness of internal teams of change agents. The consultants' theory was that the teams could introduce and stabilize change more effectively than individuals or informal groups lacking the teams' legitimacy. They thought this strategy would allow the district's staff to set their own goals, act on them, and continue to develop them after the project ended. Each team was expected to plan, introduce, and manage specific innovations and to develop and maintain an innovative climate in the district.

Team members were selected by each district, following guides for team composition set by the Center. Each team of five to eight members was to include a representative of the superintendent to give it legitimacy, power, and perspective; and each team was to represent several levels and parts of the district's hierarchy. We do not know what criteria were used by the districts to select individuals.

Three of the five participating districts chose to have their teams receive laboratory training from the Center consultants; the other two teams received no training — and soon disbanded. The Center's training theory was based on a "therapeutic model" emphasizing growth from within by a process of assimilating new information, reconceptualizing, looking toward general goals, and thinking about immediate steps toward those goals.

Team members attended a series of two-day "human development laboratories" beginning in spring of 1967. Trainees first met in T-groups and then in exercises designed to develop interpersonal skills. They then defined and analyzed problems in their districts and collected data. They also studied current concepts in child development and school learning, problem-solving strategies, interpersonal relations, and survey data feedback. The initiative for identifying problems and setting goals passed from the Center staff to the teams as the training progressed. The teams then selected innovations to introduce into their districts according to guidelines set by the Center staff. One team chose independent study, another independent study and modular scheduling, and the third a district philosophy of education.

All of the three trained teams conducted laboratory training sessions for permanent or temporary groups in its district. The sessions emphasized interpersonal relations and problem-solving procedures and met with varying degrees of success. In the first district, of 500 profesional staff, the team included five administrators, two teachers, and a school board member. The team first held a laboratory training workshop on communication, problem solving, and independent study for 20 elementary administrators and teachers. It later held a similar workshop for 40 persons.

In the second district, of 200 professional staff, a new superintendent twice changed the team's membership; the team finally consisted of the district's director of instruction, and teachers from each high school department. Only one member of the original team survived. As the team changed, its goal was changed to that of helping teachers in the district's new high school to practice innovations. It held a laboratory training workshop for the school's 100 staff members.

In the third district, of 80 professional staff, the team was twice reorganized by a new superintendent. The original team's product, the philosophy of education, alienated many older teachers. The second team tried to improve high school class formats and to introduce multi-unit elementary schools. It gave laboratory training to a combined group of high school and elementary teachers; the high school participants experienced so much conflict that their department dissolved itself soon thereafter, but the elementary teachers requested further training. The third team held a workshop for these elementary teachers, another elementary school staff that asked to be trained, and a district inservice education committee.

Data from questionnaires administered to professional staff in all five districts (three with trained subsystems and two with untrained) before and after the work of the three trained subsystems yield ambiguous results. A majority of respondents in the three experimental districts felt that the training had been valuable. However, questions about changes in morale, support for norms of openness and innovativeness, effort devoted to innovation, and teacher-principal relations provide "no evidence that either individuals or districts exposed to the interventions improved significantly more than those not exposed," according to the authors. Goodson and Hagstrom attributed the inability to show that the training was effective to the effects of turnover among administrators and teachers and to the small amount of training.

Comparisons of the Three Strategies

This section compares the Kent organizational specialists, the innovative teams described by Wolfe, and the change-agent teams described by Goodson and Hagstrom as representatives of three different strategies for changing schools. We shall discuss each outside agency's entry into the system, its conception of the role of the subsystem, the selection and training of subsystem members, the subsystem's intervention, and results of its efforts.

Entry

If the chances of success are to be maximized, we think the initiative for change should come from the client system. Further, the outside agency and the system should understand clearly what each hopes to gain from collaboration.

In all three projects, the outside agency hoped to test its change strategy and the school system hoped to become more skillful at certain aspects of its task. In Kent, the district initiated the talks that led to the project, and CASEA did not commit itself to the project until after the district's administration had defined a list of specific goals. Our research design and intervention plans were then shaped to fit these goals. We did find, though, that this contract with the top administration did not guarantee a welcome by the particular schools and groups we worked with. Although we discussed our plans with representatives from many parts and levels of the district, we found it necessary to re-negotiate entry each time we were to work with a particular school, central-office department, or other functioning group (subsystem).

The other two projects, in contrast to Kent, began when the outside agencies invited school systems to accept their intervention. Project goals and intervention plans were formed by the consultants, who then persuaded the districts to "buy into" their goals. Wolfe notes that the Institute failed to secure an adequate understanding of its objectives and of the teams' role from the schools in which the teams were to operate; he notes, too, that commitment was low. In Goodson and Hagstrom's study, two of the three teams encountered resistance from new superintendents who did not feel bound by their predecessor's commitment to the project. Similarly, the new superintendent who arrived in Kent in September of 1971 did not feel bound by the support his predecessor had given the cadre of organizational specialists.

In short, a working agreement with the top administration does not guarantee that outsiders' help will be welcomed everywhere in the system. Efforts to change schools seem to be much more successful when the effort originates from the system's desire to change itself.

Role of the Subsystem

We think that the subsystem created to help the system adapt and change will be most effective if it is a recognized subsystem with effective channels of communication and influence to other parts of the system. We also think that the subsystem should not try to demand change of others, but should be available to increase other groups' ability to change themselves. Finally, the subsystem needs the public support of the system's decision makers and must be able to renew itself.

In neither project we compare with Kent did the teams achieve a position of legitimate, effective influence. The resistance and indifference these teams encountered, especially in Wolfe's study, seem to result from unclear expectations of the teams' function, lack of administrative support, and the school faculties' perception of the teams as trying to impose a demand that the faculties change.

In both projects we compare with Kent, the teams tried to function simultaneously in two distinct roles: as experts in the innovations they proposed and as facilitators of change. The teams described in Wolfe's study were primarily experts in the innovations they proposed, while the teams described by Goodson and Hagstrom were mainly facilitators of change. In both cases, the double role seems to have led to lack of clarity about the teams' intentions and to resistance to their efforts. The Kent cadre's legitimacy was established by the support it received from the administration, by previous CASEA events clarifying the nature of its work, and by its policy of responding to requests rather than urging its services on others. Further, the Kent specialists did not set out to solve others' problems for them, or to impose new practices on others, or to act as experts in particular curricular or instructional innovations. Instead, the cadre made available its skills in facilitating the efforts of task groups to change or to reach goals they set for themselves.

Selection of Members

The cadre's effectiveness and stability will be increased, our data indicate, if participation in it is voluntary. Applicants should come from all parts and levels of the system, and should have accurate pictures of the subsystem's goals and function. Criteria for selecting members should be empirically-tested indicators of effectiveness as a member of the subsystem.

The problem of selecting competent and committed subsystem members was common to all three projects. In Wolfe's study, the criteria for team members were not specifically addressed to assessing the applicant's skill as an intervener. Many applicants were unclear about the teams' role until long after the project started. In the study by Goodson and Hagstrom, criteria were specified for teams, rather than individuals, and were only partially met by the teams selected. The authors give no data on the applicants' expectations.

In Kent, previous training events conducted by CASEA gave most applicants a clear idea of the role and function of organizational specialists, though CASEA's chief problem was an inability to sort out those applicants who really wanted to become effective specialists from those who took the training chiefly for personal profit. Later, the cadre adopted certain empirically-based criteria derived from Macbeth's (1971) study of effective and ineffective specialists. While all levels of the district were represented, more parts of the district should have been included. Specialists came from more than one-third of the district's schools, but nine came from a single high school.

Training. The two major emphases in the training in Wolfe's study were on sensitivity groups for team development and cognitive learning about particular innovations for individual competence. Very little attempt was made to encourage trainees to transfer learning from these activities to their future role. Further, the Institute's theory, which noted the importance of building effective links with the parent system and of learning the concepts and skills of the process of change, was not translated into practice. The trainees received no training in these areas. Predictably, the teams' gains and personal growth during the T-groups could not be maintained when the members were faced with the actual school situation. Since they also lacked skill in managing change, the teams could not cope with resistance or indifference to their efforts from their colleagues.

In the study by Goodson and Hagstrom, training was about equally divided between personal growth issues and intervening skills. Many of the exercises used to develop skills in communication and group processes were similar or identical to those we used with the Kent specialists. The problem-solving model that guided the teams' training and their later interventions, however, seems strong on encouraging discussion to identify problems and needs, but weak on steps to select and begin specific action plans. A strong point of the training was the gradual transfer of responsibility for setting goals from the consultants to the trainees.

Training for the Kent specialists focused on developing individual skills, team-building, and practice in interventions, with little direct attention to personal growth issues. Some specialists we interviewed said that the major defect in the training was the lack of a theoretical orientation to help them understand the training activities and to help them explain the purpose of these activities to clients.

Interventions

We think that the subsystem should not try to impose its services on others nor set out to solve others' problems. Rather, it should respond to direct requests for its services, and should involve members of the requesting group in setting goals for the intervention. Because we believe that most groups lack the skills they need to build new norms, roles, ways of making decisions, and methods for solving problems, and because we believe that a group must have these skills if it is to make wise decisions and to carry them out, we think that the most productive interventions are those that help a group acquire these skills. Finally, we think that one cannot be an effective intervener in one's own subsystem; the confusion of roles, the inevitable misunderstanding of motives, and the actual competition among desires are too great.

In each project, the subsystem's interventions reflected the theoretical orientation and training style of the outside consultants. In Wolfe's study, the initative always rested with the innovative teams, most of which could not cope with the resistance they encountered from colleagues. The plans of the teams in Wolfe's project are all fairly specific about the intended results of their efforts, but are seriously weak in specifying what steps were to be taken to obtain these results. Only one team devoted its main effort to improving the faculty's ability to practice innovations. In Goodson and Hagstrom's study, the initiative rested with the change agent teams, whose interventions were nearly always replications of the human development laboratories conducted by the outside consultants. Some interventions did deal with those issues we of

CASEA consider vital: one session of laboratory-learning was devoted mainly to clarifying the decision-making roles of faculty and administration in a new high school. However, the change agents did not seem to successfully mix content and process aspects of their dual role.

Results

We want to be able to point to specific improvements in the school system that we can attribute to the subsystem's efforts. We especially want to be able to detect these effects, and further effects, long after the outside agency has terminated its contract. Neither Wolfe nor Goodson and Hagstrom could demonstrate that their projects had achieved their objectives, while the evidence we have on Kent supports the claim that the cadre has improved the communicative and problem-solving abilities of significant subsystems of the district.

These comparisons, few though they be, lead us to believe that the Kent cadre was not only unusual compared to ordinary subsystems in school districts, but was probably also unusual when compared to innovative efforts similar to the Kent cadre in the three ways we enumerated: (1) an outside agency (2) furnishing laboratory training for an inside subsystem with (3) the goal of raising the system's ability to do things in new ways.

A Third Comparison

Still a third consulting body connected with a school district has recently come to our attention. All we have at this writing is a digest of a longer report by Bunker and Singer (1974), and we cannot tell whether the members of the consulting body were also members of the school district. At some point, the consultants seem to have become independent of the district. The digest makes it clear, however, that the consulting body is comparable to the other three we have discussed on our other two points: the school district at first received help from an outside agency, and the goal was generally to raise the system's ability to do things in new ways. The digest also makes clear that the consultants encountered most of the same kinds of hazards met by the three groups we have described here. Bunker and Singer say:

> The program, which began in 1966 and is still in existence, raises a number of important issues that involve social control . . . Specifically, the authors discuss the implications of partial training for the use and control of that training, the nonprofessional's desire to develop and use his skills outside of the prescribed area of his training, and issues of certification and licensure. The analysis of this group of "independent nonprofessionals" discusses their control of two sets of issues: 1) The issues faced within the group in developing a competent service delivery system, especially problems they faced in continuing their own training, in improving intake procedures, and in recruiting and training new nonprofessional personnel; and 2) the issues faced by the nonprofessional group as they developed competence and decided to use their skills outside of the framework of the institution that sponsored their training, particularly their relationship with the local mental health professionals and with the public. The authors first studied this development as program evaluators for the Board of Education when the program came under attack in the community (p. 273).

This program of work is also notable for the fact that it has been in operation since 1966, which makes it even older than the Kent cadre.

It is true that one hears occasionally of programs of organizational improvement of schools and districts that sound very promising. It is very difficult, however, to obtain documentation of the quality, method, and longevity of these programs. One usually hears about them when they are new and hopeful, and one rarely hears about them when they fail. It is also true that there are numerous private consulting agencies that offer their services to schools to help them with organizational problems. It is rare, again, that these agencies publish evidence of the effects of their work. Judging on the basis of published evidence, we conclude that the Kent cadre joins the illustrious company of a very few fully funded experimental schools and possibly the program reported by Bunker and Singer as an adequately documented innovative system for organizational improvement that has continued to carry out its original function for as long as six years.

We conclude this chapter with some special theoretical remarks about linking an innovative subsystem to the old system.

Linking an Innovative Subsystem to the District

When we look at school organizations as systems composed of a number of somewhat separate subsystems, we are caught immediately by the problem of appropriately linking the group of innovators with other parts of the system. It is far easier to create a new subsystem than it is to link it effectively to other subsystems that it is expected to influence, and many innovative failures can be traced to linkage problems (for instance, see Lynton, 1969; and Miles, 1964). In complex organizations with multifaceted objectives, people are separated into separate groups (schools or departments) to deal with separate aspects of the organization's overall goals. The work of these fragmented groups needs to be coordinated so that the efforts of the several parts are complementary, but organizations too rarely integrate their separate parts in smooth fashion. This is especially true for innovative subsystems.

Innovative groups are different from operating groups in many ways. First, they are oriented to novelty and change, while operating groups are oriented to stability and routine. Second, innovative groups often think in the fairly long range, while operating groups (such as teachers in schools) are tightly bound by the day-to-day cycle of activities. Third, innovative groups usually develop values and norms that conflict with the orientations of operating groups. The familiar complaint of teachers that curriculum specialists and other central office departments "don't really know what it's like in the classroom," is a signal that the two subsystems are mutually ignorant of each other's orientations: the separation is too great.

At the other end of the scale, the separation between innovative and routine functions is too small when we expect an ad hoc group of teachers to take on a substantial innovative role with no relief from their regular classroom duties.

In short, the innovative group must be separate from operating groups; it must have resources such as administrative support for its efforts, and material resources such as released time and a budget; and it must also have links with the operating groups that allow it to communicate with and influence those who must actually put the products of innovation and change into practice. Miles (1964) asserts that innovative groups need some isolation to avoid being trapped in the assumptions that guide the organization's routines, to bypass vested interests, and to protect the group's ability to experiment. However, innovative groups that become too isolated typically become alienated from others in the organization, with the result that the group has poor communication with groups outside itself, low credibility with potential users, and difficulties in recruiting new members.

In the establishment of the cadre and in its subsequent work in the district, an appropriate separation from other groups was maintained, as well as effective links between the cadre and both decision-makers and potential clients. The district's administration agreed in 1967, as part of its contract with CASEA, to establish the cadre as a permanent and distinct subsystem of the district, with a permanent and distinct task--carrying out OD functions. A formal niche was created, the new group was given public recognition in both in-house publications and in the local newspaper, and the district provided budgetary support for released time for cadre activities and for purchasing materials.

While retaining the necessary separation, the cadre was appropriately linked with other parts of the district in several ways.* The cadre's members were not full-time specialists, but retained their positions as teachers, administrator, or whatever; and this sort of "link-pin" position of its members kept the cadre in touch with all parts of the district. Thus, the cadre's members have been continuously available "insiders" who have a degree of trust granted to them by potential clients and a ready source of data about conditions in the district. However, an individual trainer from the cadre is also an "outsider" to his clients; the rules of the cadre prevent a member from serving as a trainer within his own school building or administrative group. Clients are more willing to open up interpersonal concerns when the trainer is not intimately involved with the group's ongoing life. Further, the specialists do not try to solve clients' problems but to facilitate clients' attempts to do so, and clients select the trainers they will work with; the cadre's services and personnel are therefore more acceptable to clients than consultants would be who prescribe substantive changes or solutions to problems. Also, the cadre has done work with many schools and groups in the district, and they are therefore readily perceived as accessible to all parts of the district equally. In brief, the position of cadre members in the district and the cadre's procedures for working with clients give greater legitimacy to its status and activities than some other possible arrangements.

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*On the relations between innovative groups and other parts of the organization, see Lynton (1969) and Miles (1964). A theoretical perspective on the problems of separation and linkage is provided by Lawrence and Lorsch (1967).

In summary, an innovative group must be linked to other parts of the system in a particular way: it must be distinct from other types of subsystems, but it must have strong links in the right places to other subsystems. Links to the decision-makers are vital, so that the cadre can acquire resources and so that it can make its services available to large-scale organizational objectives; it is just as important that it have channels of communication and influence with operating subsystems so that it can effectively interact with them. The survival of the cadre to date has resulted in part from successful resolution of these issues; but its survival rests, too, on some internal properties and processes of the cadre itself.

Our Pride and Joy

We are proud to have given the helping hand to the Kent cadre. We are proud of the quality and quantity of the work they have done and of their strength in overcoming the obstacles that have appeared in their way. If they still exist when this book sees publication, we shall be doubly gratified.

If the Kent cadre succumbs to its present lack of moral and monetary support, we shall still be proud of its long run on the innovative circuit -- a circuit that has banished many a stellar performer from the stage either with boos or with indifference after a much shorter time than six years. And if the Kent cadre does fade from the scene, we can still watch hopefully the cadre at Eugene, Oregon, which we described briefly in Chapter 4.

The next chapter examines some of the strengths and weaknesses in the methods of the Kent project.

Chapter 13

PROBLEMS OF METHOD: HOW GOOD ARE THE DATA?

by

Bell and Runkel

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Chapter 13

PROBLEMS OF METHOD: HOW GOOD ARE THE DATA?

by

Bell and Runkel
(final)

This chapter contains an examination of the strengths and weaknesses of the data, research design, and analysis techniques used in this study. Our research strategy was carefully chosen to yield realistic data and strong inferences about causality. Although there are several sources of error that must be considered when interpreting the data, we have used analysis techniques designed to overcome error, and we feel that, on the whole, our data deserves confidence.

The Overall Research Strategy

To answer the question, "How good are the data?" We begin by looking at the choices we made among the research strategies available. Runkel and McGrath (1972) point out that strategies differ considerably in:

1. the *kinds* of information they can yield,
2. *how much* information can be gained from them,
3. how "pure" or *unconfounded* the information can be -- that is, how well the investigator can make strong inferences about the relations in the data,
4. what the investigator must know, or *assume* he or she knows, about the problem before beginning the study,
5. how *generalizable* the study results will be beyond the specific events included in the study (that is, how much the investigator can say about events not observed), and
6. how much and what kinds of *resources* are required by the strategy.

The choice of strategy should be made on the basis of (1) the nature of the problem the investigator wants to study, (2) the state of knowledge about the problem, and (3) the amount and kinds of resources available to the investigator (including the cooperation of subjects).

In the Kent Project, (1) we wanted to maintain the natural behavior setting, (2) our knowledge and technology was in an embryonic stage, and (3) our financial and personnel resources were limited. For these reasons and because of the nature of the problem under study, we chose to undertake what Runkel and McGrath (1972) have classified as a field experiment. A field experiment can be defined as making certain systematic observations within naturally occurring behavior systems while introducing some deliberate manipulation of a very few critical variables. Figure 13-1 diagrams eight research strategies to show some important similiarities and differences.

Figure 13-1 asserts that field experiments deal with particular behavior systems (as do the other strategies lying at the right of the diagram) and that their research methods are obtrusive to some degree (as is the case with the other strategies in the upper part of the diagram). In other words, field experiments maximally maintain the integrity of the natural system while introducing some obtrusive research operations (consultation and training, in our case, as well as questionnaire administrations and interviewing). Working with the natural system usually generates more true-to-life information than do the strategies at the left of the diagram, and the obtrusive operations (because they are more highly controlled) usually yield

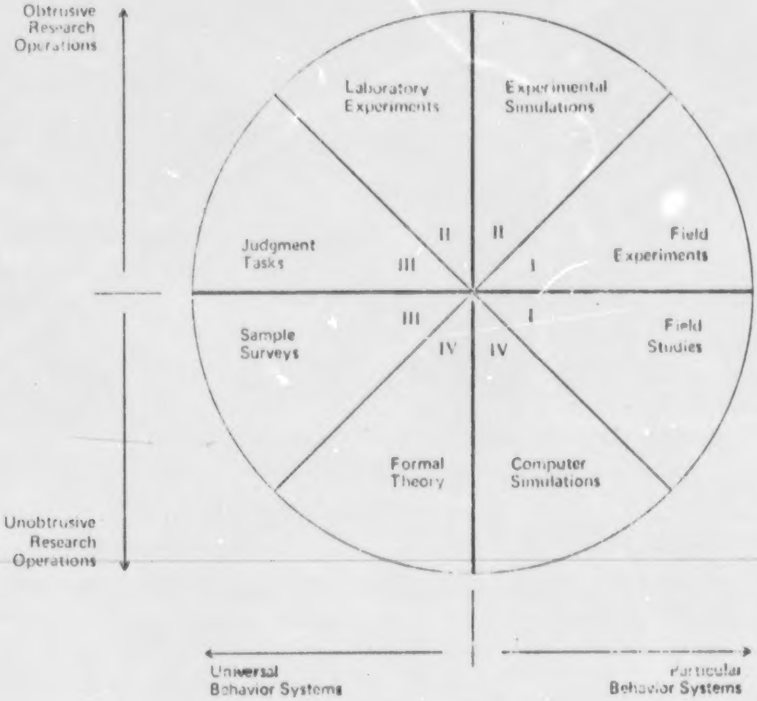
Obtrusive Research Operations
Laboratory Experiments
Experimental Simulations
Judgment Tasks
Field Experiments
II
II
III
I
III
I
IV
IV
Sample Surveys
Field Studies
Formal Theory
Computer Simulations
Unobtrusive Research Operations
Universal Behavior Systems
Particular Behavior Systems

Figure 13-1

Framework for comparing some major research strategies (adapted from Runkel and McGrath, 1972, p. 85)

stronger inferences about causality than do the strategies in the lower part of the diagram. However, working with a natural system also generates behavioral measurement that has less precision and generalizability; that is, in our case, it made it harder for us to generalize about other schools. Nevertheless, we were willing to pay this price in the Kent project to achieve the realistic data and the stronger inferences about causality that a field experiment offers. We shall say more about this compromise later on.

In our application of the field-experiment strategy, two issues require special attention: the issue of the influence of diagnosis on treatment and the issue of randomization.

Influence of Diagnosis on Treatment

In a highly controlled laboratory experiment, great care is taken to specify the "treatment" exactly and keep it uniform from case to case. In field experiments using a highly complex "treatment" such as OD, the treatment must be adapted to the needs of each school (as our theory states), and uniformity from case to case must be relinquished. This influence of diagnosis on treatment raises the issue of volunteer populations.

In this study, the experimental schools were selected by their willingness to volunteer and by characteristics indicating that they would respond productively to training.* For some substudies, we selected control schools to differ as little as possible from the experimental schools; for others, we used every available school.

The complaints against volunteers so often made in the literature on research methods are not applicable here. Our study would have become meaningless if we had used schools that had not volunteered for training. To try to bring OD training to an unwilling school is to beg for failure. And it is impossible, of course, to bring training to a school without its knowledge. In brief, because OD is a collaborative strategy, the volunteer population was the correct population for this study.

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* At the time we selected schools to be trained, our indicators of readiness were crude and intuitive. Chapters 5, 6, 7, and 8 have described more valid and usable indicators that have the backing of data.

Of course, this study does not answer all the questions we have about OD training. It is true that we cannot judge whether many things we did -- that is, particular features of our consultation -- will have helpful or hindering effects in other schools. For instance: Is it better to teach the basic face-to-face communication skills before beginning group work, or should the skills be taught by modeling during the group work? Should training begin with clearly identified subsystems or should training begin before the subsystems are clear so that school members can use the skills they learn during training to help the interveners find the subsystems more surely? These are only two examples of many technological questions this study leaves unanswered.

One should not suppose, however, that the "treatments" used were so divergent that they could not yield variables that are important to other schools. In our opinion, our analysis of data has brought out several variables that distinguished in important ways the reactions of schools to intervention. Some of these variables are the readiness of school staff to communicate during emotion (Chapter 5), the number of hours spent in training (Chapter 6), the manner of organizing the faculty for instruction (Chapter 6), and the readiness of the staff for collaboration (Chapter 7). In Chapter 14, we shall review others. We turn now to an issue that is directly affected by the influence of diagnosis on treatment.

Randomization

Probably no topic in the textbooks on research is more misunderstood than that of the advantages and disadvantages, the possibilities and the impossibilities, of the random sample. The mathematics of statistical inference from a random sample was developed some decades ago by workers in genetics and agriculture. A typical problem was that of making judgments about the average characteristics of dozens or hundreds or even thousands of seedlings in some plots when compared to those in others. The theory of probabilistic sampling that evolved was extended to the problem of estimating characteristics of a specifiable population by extrapolating from the characteristics of an appropriately drawn sample. Using this theory, the researcher was able to calculate the probability that an outcome resulted from sheer chance. This technique has seen successful -- even triumphant -- application to surveys of population characteristics (including opinions and attitudes) where the population is specifiable either by listing names or by exhaustively specifying the areas within which respondents are to be found. Perhaps because of the dramatically successful application of the randomization technique to certain problems (but only certain problems) in social science, it has become, in some minds, the foremost mark of respectability of a research design. This is unfortunate.

It is unfortunate because to apply strict randomization techniques to a field study like our own is impossible, undesirable, and at times, even unethical. There are several subtleties. First, where diagnosis must determine what "treatment" is to be given a school (for example) -- or, indeed, whether it is to be given any treatment at all -- the population to which the treatment is properly to be given cannot possibly be listed before the diagnoses are made. Are we to diagnose every conceivable case before selecting our sample for organizational consultation or training? Second, if the difference between some schools trained and some schools not trained is so slight that there is a suspicion that the differences might be due to chance, an ethical problem arises: should the experimenter then ask another group of people to undergo all the trouble of trying that kind of training when there is that much doubt of its effect? Other complexities could be discussed. One is the matter of defining a school as a member of the population to be studied; schools vary a great deal nowadays in important ways and the ways are not always easy to measure. Another is the sheer expense of reaching random schools in an area as large as the United States. Yet another is the practical problem of finding a client who wants to enter a long-range and expensive collaboration. There are others.

Randomization is often offered as a solution to the problem of representativeness. Recent graduates of courses in inferential statistics often have the impression that randomization assures representativeness. It does not. Selecting schools randomly from a list does not assure you that the schools you pick will be similar to one another nor close to the average in their characteristics. The representativeness of the schools trained and studied is important, but the manner by which representativeness can be assured is not simple. Random selection assures only lack of bias -- which means that the likelihood of error in any direction will be no greater than the likelihood of error in any other direction. And that is all that random selection does. It does not protect the researcher against error; it only makes sure that the error can occur in one direction as easily as in another.

Lack of bias (meaning equal probability of error in unknown directions and amounts) can be a valuable quality when one is dealing with a large sample of cases (certainly larger than was economically feasible in this study) and wishing to make statements about mean probabilistic expectations in the population at large. But when one is studying a very few (say, five or six) very expensive cases in the natural setting, and when one wishes to learn how to deal with the uniqueness of the next school or district, then the advantages of lack of bias dwindle rapidly. In practical developmental or clinical work, one does not wish to learn what to expect on the average (this is what randomization strengthens); one wishes to learn how to become accurate in diagnosing each particular case. To do this, one develops the best diagnostic theory one can before the study and then measures many variables in many ways and follows what happens to them during the period of the study. If these concepts serve to predict progress in the next three or four cases, confidence in the theory and technology rises sharply.

Neither the experimental schools nor the control schools were selected randomly in this study. And since the study's purpose was more to develop a technology than to make statements about schools or districts in general, the lack of random sampling is not a weakness. Randomization is important when one wants to isolate a single variable shared by large numbers of a specifiable population, but it is much less useful when one wants to learn how to deal with the many variables that are present in the next particular client.

It is true that the methods of training used in this study, and even the methods of diagnosis, may need important modifications to be applied to other types of schools -- such as those in the inner city. Our approach is to develop an articulated sequence of diagnosis and training that can be modified as special circumstances are met. This is clearly a better design than to try a single treatment on a sample of schools and then expect that treatment to have the same effect on the next schools encountered that it had on the average school in the original sample. Further, our theory and experience indicate that the organizational characteristics of the client are crucial to the success of the treatment. Therefore, we are most interested in the interaction of each particular treatment and client. We are less interested in the effects of a single treatment over many different kinds of clients.

People in a school do not want to know whether a course of training is likely to have beneficial effects on an average school. They want to know whether it can be modified to have a high probability of being beneficial in their school. We have provided some information about the general characteristics of the schools that were part of this study so that readers can make comparisons between characteristics of their own schools and those in the study and decide for themselves how applicable our findings are to their own situations.

Given our emphasis on diagnosis and the characteristics of a specific school, we have often been urged to apply psychological and sociological measures to the participants in our studies. In the past there has been much importance placed upon the psychological and sociological factors of participants, on the grounds that these factors shape the manner in which people participate in organizational life. However, we have rarely found a participant about whose personality we found that we needed to know more than we discovered through the normal course of consultation; that is, we have sometimes found ourselves surprised by events we could have predicted better if we had known more about the history or sociology of the school, (or subsystem) but never by lack of knowledge of the sociological or psychological characteristics of an individual. What an organizational specialist must learn is how particular people in a particular school or district interact at a particular time. Additionally, he or she can gather this knowledge faster and more accurately by watching these people and interacting with them than by any battery of personality tests or list of sociological characteristics.

There is no denying the fact that our study has left many interesting and significant variables unexamined and that some of these variables added error to our data in unknown ways. Nevertheless, the fact remains that the training and the conditions of training were often strong enough in their effects so that patterns in the responses of schools could show through, despite all the sources of error. It is important, however, to be explicit about ascertainable sources of error, and the next several subsections will describe the more important ones.

Sources of Error

In judging the efficacy of training, we must be aware that there are factors completely irrelevant to the training itself that could have biased our results. For example, the personal manner of a consultant may cause the staff of one school to be more receptive to training and cause another staff to be less receptive.

Or, a questionnaire item might not have the same meaning in one school as another. For example, one questionnaire item asked whether teachers in the school communicated openly and honestly with one another. Such a question is always interpreted by respondents against their own experience and expectations. People in trained schools generally have higher expectations about open communication than people in untrained schools. Therefore, trained respondents might be more likely than untrained to rate their schools poorly because they do not live up to their own high expectations -- even though the openness of communication in the trained schools is actually greater than in the untrained. The strength of this effect, of course, is unknown. In the following subsections, we shall discuss the kinds of error we have just illustrated and several other kinds as well.

Non-uniformity of Training

In some of our analyses -- notably that in Chapter 6 -- we have been able to examine the schools that had received more training separately from the schools that had received less. In most of our analyses, however, the small number of trained schools forced us to pool all trained schools as if they had received uniform "treatments" -- though in fact they had not.

Amount of training. The amounts of training given the schools in this project were small compared to amounts given in later projects by CASEA. And there were great differences even within these small amounts. The number of hours during which at least one outsider (usually a team of two or more from CASEA or the Kent cadre or both) was present in a training role in an elementary school ranged from 12 hours (school K05) to 46 hours (school K12). And these figures do not entirely encompass the differences that existed. In some schools training was given only to a teaching team or group of department heads, while in other schools an entire faculty was trained. Appendix 5-A gave details on amounts of training, the composition of the trainees, the source of the consultants or trainers, and the spacing of the sessions through the calendar.

Variations in style of training and consultation. The teams of trainers or consultants contained shifting membership and came from two different organizations -- CASEA and the Kent cadre. There were, however, a number of factors working to bring some similarity to the performance of the teams. For one thing, during this project we were all greatly influenced by our training leader and "model trainer," Richard Schmuck. He was our chief designer of training sequences and our chief guide to proper conduct in the field. This is not to say that we were all merely docile and obedient. All members who were to act in the training role in a forthcoming session were expected to contribute to its design. There were many long and heartfelt arguments about the components and sequencing of training activities, assignments of individuals to subtasks, timing, and so on. But these very arguments served to clarify the extent of deviation we would and would not permit from the chief norms and values of the CASEA crew.

Also, all new members of the CASEA crew came under the strong influence of Schmuck, Runkel, and the senior research assistants as they worked their way toward full status as co-trainers. This socialization process made members of the CASEA crew largely (though not wholly) interchangeable as members of trainer-teams that went out to schools and other parts of the district.

The Kent cadre of organizational specialists were influenced similarly. They received their initial training from the CASEA crew, with Schmuck and Runkel as the key leaders. One of our research assistants left our employ, took a job as counselor in the Kent district, and became an active member of the cadre; later, he became its coordinator. All these influences resulted in much common content in training events -- especially certain interpersonal communication skills, exercises for role clarification, and a sequence for group problem solving. They resulted too in common norms governing relations between consultant and client.

Despite the similarities in method and norm, important differences in training and consultation occurred among schools. Many of these differences in training and consultation arose because different schools asked for different kinds of help. Other differences arose as we tailored our interventions to the kind of reception and information a school gave us during diagnosis and first phases of entry. There were also actual differences in behavior between the field teams from CASEA and the Kent cadre. The most obvious difference was that in the amount of training given, as we said earlier. We have given descriptions of training episodes in Chapter 2, and we gave further details in Appendices 5-A and 5-C.

Scheduling of training and assessment. One final point we believe to be critical in evaluating OD intervention is the length of time between the intervention and the final assessments of its effects. As we concluded in Chapter 10, we believe that a study that provides adequate evidence of the stability of an organizational change would, at least, collect data (a) before the planned change, (b) just after the change has presumably been brought about and the consultants have left, (c) a year later to see whether the school maintains the new shape of things on its own, and (d) a year after that to see whether the new thing still works when the staff is operating for the first time with a year's experience behind it.

Ideally the evidence reported in this book would meet these criteria, and we would have a pretest on experimental and control schools followed by three posttests for comparisons. Unfortunately, most of the substudies in this report do not fully achieve this design because the training was distributed over the four years of the study and because we did not have four years of assessment on some schools. The substudy reported by Saturen in Chapter 7 comes the closest to meeting the design specifications; other substudies use modification according to the schools chosen as the focus of the study. Some schools had more that one pretest (that is, administration of questionnaires more than once before training); other schools had none. Some had more than one posttest, but few trained schools had the desired three posttests. Also, some schools had more than one period of training or consultation, and the spacing of the training with respect to pretests and posttests was not uniform. So the substudies varied from sequential posttest-only designs (the multidimensional analyses of each year in Chapters 5, 8, and 10, for example) to modified two-way designs (Wyant's substudy in Chapter 6) to pretest-with-control-schools-and-two-posttests (Saturen, Chapter 7).

Questionnaire Items

The format for each of the items in the questionnaires appears in the body of previous chapters. Most of the items employed had been used in previous work by other researchers, notably, Jongeward and Giammetteo of the Northwest Regional Laboratory in Portland, Oregon; Gross and Herriott (1965) in their "Educational and Professional Leadership Questionnaire;" Abbott, Pellegrin, and Eidell in their early Program on Innovations at CASEA; and Mial, Watson, Buchanan, and Klein of the Cooperative Project for Educational Development. We selected items from these sources because of the relevance of the items to the information we sought and their successful application in prior research. We cited some of the relevant literature using these items as we introduced them in earlier chapters.

Additionally, several of the items were written specifically for this study. As our technology and theory began to emerge during the early portions of the work, it became apparent that we needed to gather information on variables we had initially overlooked. The items probing into the school's use of its variety pool are an example of the items we generated specifically for this work. Because of various technical as well as practical reasons, we were unable to analyze our items, whatever their source, for reliability and scalability in the customary manner. We have relied almost entirely on the "construct validity" of the items -- upon the dovetailing patterns of meaningful results the items gave. We have described some of this dovetailing in several chapters, we shall give some examples in the last section of this chapter, and review the matter again in Chapter 14.

Unfortunately, most of our data were collected by the single method of the questionnaire. Questionnaires have many limitations. One always runs the risk of gathering paper-and-pencil responses that may not reflect real behavior. Further, many of our items were included on only one or two administrations, making them useless in examining trends. To some items, respondents chose a particular answer in such high percentages that the items could not be used for comparisons. We also had the problem of differential return rates for the questionnaire as a whole, as well as differential response rates to certain items. A good example of the latter problems seemed to center around the respondents' concerns with confidentiality.

In 1968 and 1969, respondents were asked to "provide any further thoughts about the project, questionnaire, etc." In tallying these reactions, it became evident that worry about the confidentiality of the information changed drastically from 1968 to 1969. In 1968 we obtained 63 comments at the end of the questionnaire; 37 percent of them were concerned with the personal nature or confidentiality of the information. In 1969, there were 65 comments about the questionnaire; however, only one person voiced any concern about the confidentiality of the information, while two individuals called for even more personal forms of information gathering such as individualized interviews. This increased trust probably caused mixed effects on other items; that is respondents may have told more about conditions they resented, or told more of their friendly feeling toward specific other persons in the school, or skipped more items (in the confidence they wouldn't get punished), and so on. One result we noticed was that certain items requiring disclosure of names and positions had relatively low response rates in the first administration, but showed consistent increases in response rates as the study progressed.

Just as the number of items skipped may have indicated the respondents' involvement, which may in turn have affected the validity and reliability of the information gathered, so differences in the rate of returning the entire questionnaire no doubt caused variability in the data. This problem was discussed in Chapter 5, and the relevant information was reported in Appendix 5-B. At this point, it will suffice to say that there was some variability in the return rate, with a high of 85 percent in 1968 and low of 54 percent in 1969; the rate rose again in the later years.

Administering Questionnaires

The questionnaires were the major source of our data. Four forms of this questionnaire were constructed to maximize the relevance of the questions to the respondent's job: one for the administrators in the central office, one for building administrators, one for teachers-and-others, and one for service personnel (secretaries, custodial staff, cooks). Persons employed less than half-time were omitted. The questionnaires were administered four times during the study: in March of 1968, May of 1969, April of 1970, and April 1972.

The first administration came prior to any intervention in the districts and was intended to provide a base of information.

Each year a standard format was used in administering questionnaires. The majority were administered in faculty meetings. However, on occasion, some persons filled out questionnaires individually and returned them by mail. The persons and organizations administering the questionnaires differed from year to year. In 1968, staff from CASEA, in conjunction with staff from NWREL (Northwest Regional Educational Laboratory), trained PTA members who in turn administered the questionnaires in the districts. In 1969, staff from an opinion research laboratory in Seattle administered the questionnaires. A minor problem arose in that year when one of the laboratory's staff members took it upon herself to lecture a school staff upon the pernicious effects of sex education. Though we were horrified at the time, we have discovered no effects of that incident on responses from that school. Though nine or ten teachers commented on the incident, they seemed to view it as a lack of professionalism on the individual's part rather than an attempt by CASEA to influence them. In 1970, part of the staff from CASEA, in conjunction with the Kent cadre, administered the questionnaire in three districts. In 1972, one of our senior staff members, along with some colleagues at CASEA, collected the information from the three districts.

While it is true that in each year the settings and instructions were as standardized as possible, the fact remains that different people (people who were viewed differently by the respondents) administered the questionnaires in the different years. The different origins of the "evaluators" undoubtedly had some unknown effect on the reliability and validity of the data. Some of the evaluators were internal to the project; that is, they were viewed by the respondents as being directly and personally involved in the interventions. Other evaluators were external to the project -- probably viewed by many as not involved in the project beyond the data collection. Whether one or the other type of evaluator provided "better" data, we do not know. We began the Kent project with the intention of keeping the evaluators separate from the interveners (consultants and trainers) in the respondents' minds. For financial and other practical reasons, we were not able to achieve this, and we gave up the attempt by 1970.

In our opinion, internal evaluation and external evaluation are of equal effectiveness. Each has its strengths. Neither status, in fact, can be achieved in all purity. The internal team of trainers or researchers can achieve more intimacy, rapport, and trust than external evaluators who show up only when it is time to take data, but "internal" evaluators can never be seen as wholly ordinary members of the organization when they act in the role of evaluator or investigatory scientist -- as they must for purposes of diagnosis or checking progress. External evaluators can achieve more control of the conditions of data-collection from occasion to occasion to the extent that they are perceived as unconnected with the interveners, but they cannot, for various reasons, be completely convincing about their total lack of connection. In the Kent project, the persons who administered our questionnaires were no doubt seen sometimes in one role, sometimes in the other, and sometimes in between.

The problem of interaction between the trainer-evaluator and the respondent was also confounded by the use of repeated administrations of the questionnaire to the same sample. One thing we have learned over and over again is that the participants' perception of the trainer and the trainer's data-collection teams changes radically from time to time as training and other experiences with the interveners progress. This makes the "control" provided by a pretest very dubious indeed when it is conducted by people seen to be the trainer's agents. Sometimes, immediately after training, participants will tell a more favorable story to external evaluators than to the trainers themselves -- because they wish to protect "our consultants" from strangers. Sometimes too, in the third or fourth year of a project respondents may give a more favorable picture of conditions in school or district than untrained respondents, even though both groups are responding to the same objective facts. We shall not take space for the reasons here. The point is that the data at each occasion of evaluation result from the interaction between trainer-evaluator and the participants, and the nature of that interaction changes constantly. The data cannot be interpreted in the simple way that we interpret standard control-group design, but must be interpreted in the light of evidence about the changing relationship between trainers and participants and in the light of any other relevant data. All this is further confounded by the different amounts of training given to each school and by the variation in time spans between a training event and data gathering.

Control and Generalizability

Throughout this chapter we have discussed many factors that confounded and weakened the data. These factors would be critical if our goal had been to estimate mean levels of variables in some specified population of schools or even if it had been to declare that mean differences between types of schools in the wider population were greater than zero. Our data cannot permit us to make inferences of this sort; there were too many ways in which our data failed the sampling requirements. Neither the districts nor the schools were randomly selected. Our treatment was not uniform in content or duration. Our intervention staff at various times was composed of different persons with different levels of experience. The schools themselves possessed differing climates, personnel, and organizational structures. To confound matters, the schools changed from year to year, often in salient ways, (see, for example, Chapters 5, 8, and 10). New schools entered the study during its progress. Our questionnaire varied over the years and did not make up a random sample of the school or district. And these are only the most obvious biases and confoundings.

In some of the substudies in this book, we have picked only those schools that satisfied the premises of certain hypotheses. In other analyses, we have let every existing school into our tables. Often in constructing categories for analysis we found ourselves making comparisons based on only one school per category, as was the case in Chapters 5 and 8. This factor alone is sufficient to make any statistical analysis suspect. Certainly, our general permissiveness toward the data has weaknesses from the point of view of statistical significance testing, but it has strengths from the point of view of obtaining clues to some possible ranges of effect among schools.

Our study was not a highly controlled laboratory experiment but a field study of what happens in real schools. Real schools do move from one category to another -- and back again. Real staff members do fail to appear when an administrator or a consultant goes to the school to get information -- or, if present, real staff members do sometimes decline to answer, or respond to a questionnaire. It makes no sense to dismiss the significance of our data merely because the data reflect what happens in real schools.

Our purposes were (1) to ascertain the likelihood that consultation and training produced systematic differences between the schools in our study, (2) to ascertain whether the differences declined, stayed the same, or increased in subsequent years, and (3) to ascertain some conditions that helped or hindered the effects of the training so that consultants in other schools might have better methods of diagnosing the likelihood that consultation and training like ours will succeed or fail. This last purpose explains the way we hope our work can benefit schools beyond those we studied. Instead of wishing to predict averages in a population, we wished to predict that schools having certain characteristics will respond with more profit to training of our sort than schools with other characteristics. We think it very likely that schools elsewhere that are high on test A (for example) will respond to our type of consultation in much the same way as schools in Kent that were high on that test. Of course, there may be higher-order interactions that are important. It may be that schools high on test A respond to consultation the way those in Kent did only if they are also small schools, or schools wanting to change structures, or schools with strong, trusting, skillful principals. We hope other consultants will make use of our findings in their diagnoses so that our conclusions can receive further cross-validation.

If our findings in this book are to serve as advice to organizational consultants, our assessment of our variables must have reasonable reliability and validity. The argument we just made about the best kind of use to be made of our results does not exempt us from adequate assessments of conditions and outcomes. We used various methods to enhance our assessment procedures. These will be discussed in the following sections of this chapter.

Questionnaire Items

When we chose to use questionnaires to collect information, we became vulnerable to all the problems associated with this method. The responses to many of our items depended upon the subjective interpretation of the respondent. Given the differences that exist between individuals, as well as between schools, it is impossible to argue that each item had the same meaning and salience to each respondent. Further, we had to accept different response rates both for individual items and for the questionnaire as a whole. The remaining sections of this chapter will present some of our methods of examining or strengthening the data to overcome some of the problems and weaknesses mentioned earlier.

First, we selected most of our questionnaire items from other studies in which the items had been the media for exhibiting outcomes predicted from theory. While it is true that many of the items we used had proved fruitful in other studies in which reliability coefficients for the instruments had been calculated, one should not assume that the information we gathered is automatically of equal reliability. We obtained no indices of reliability, and we could not make use of the indices calculated by other researchers. For one thing, a reliability calculated for a set of items in one setting can never be safely assumed to apply to a different setting. Furthermore, we broke up the items written by others into smaller clusters or into single items for analysis, and the earlier reliabilities could not then apply even if the settings were identical. However, we believe that one of the reasons these items discriminated among our schools -- as indeed almost all of them did -- was that they had done so among other schools in other studies.

Second, to strengthen our indicators, we examined each item administered and selected for this report only those appearing to have no obvious weaknesses. We selected the items by examining the tables and graphs for each item and eliminating those items that had (1) very low response rates, (2) a diminished response range and therefore provided little discrimination between schools, and (3) response ranges that indicated some misinterpretation on the part of the respondents. We eliminated items with low response rates because the differences indicated by these items were due to the response of one or two individuals and thus were judged as very likely untypical of the actual school mean. We eliminated items with small response ranges because they could not discriminate between schools. We eliminated a few more items because it was apparent that the respondents had not understood them. For example, on one item we asked if the respondent had attended a specific training session with the consultants. This question was followed by a question about the usefulness of the session. Unfortunately, certain school staffs must not have known which training session we were asking about. First they indicated in rather large percentages that they had not attended the session and then in equally large numbers indicated that it had been a worthwhile session. We feel that by applying these criteria to the items we have eliminated many which would have provided useless or weak information at best.

Third, many of our findings are based upon clusters of items or tests. We seldom relied upon the information of a single item to support an inference. This clustering of items has the effect of increasing the number of "sample observations" for each variable, thereby increasing the reliability of the measurement. It also has the effect of balancing out the problems associated with single respondents responding to single items in a purely subjective manner. By asking about a particular factor in several different ways (multiple items) we have obtained an aggregate of the respondents' views of that factor and have obtained a more stable and reliable measure of that factor.

One can extend this line of thought to the school also. Most of the time within this study, the school was the unit of analysis. This in itself may have provided us with more stable information than a study of individuals would have. Perhaps our measures of schools were more reliable than we expected because we used reports not so much of individual characteristics but of school characteristics -- what the school was like and what was going on in it. By averaging the individual scores to obtain the school's score on each item, we obtained more reliable measures. The point is that we obtained many consistent patterns that hold throughout the study. Much of the faith we have in the data is because of these patterns. Their stability is very much tied to the clustering procedures we employed and the fact that we are looking at schools and not individuals.

Fourth, our use of multiple tests in multidimensional scaling in Chapters 5 and 8 can also be seen as an effort to strengthen the data. By using the multidimensional method, we were able to examine similarities among schools on several variables (tests) simultaneously (while adjusting automatically for problems of central tendencies and ranges). By examining several variables simultaneously, we hoped to avoid making inferences that were based solely upon the pattern of a single variable. Instead, we have looked for trends that were strong enough to have practical importance and that showed in the data more than one way. These features strengthen our confidence in the validity of the data.

A special example of verification for the validity of our data can be found in Chapter 5. The later sections of that chapter report our finding concerning communication, openness, and responsiveness. Not only did we measure these three variables with tests A, B, and C, but we also had sufficient data to measure the same variables again with tests D, E, and F. We were pleased to find that the chief pattern discovered in tests A, B, and C was duplicated in tests D, E, and F. This duplication can be seen as a form of construct validity, which, though not available for all tests and items, is certainly worthy of consideration and provides additional support for our claim that the data are stable, meaningful and useful.

There is other confirmation of the strength of the data. In at least two instances, the information gathered by the questionnaire was in some way confirmed by a later analysis or by other data gathered by a different method. The first relates to the generation of the items measuring variety pool. As our work in Kent progressed, our understanding reached a point at which we believed we had omitted one or two important facets of communication. Consequently we generated the items that we felt would measure variety pool. In later analysis, Wyant (1974) factor analyzed a group of items that related to communication. One of the listings produced by this factor analysis consisted of the items we had added to the later questionnaire -- the items relating to variety pool. The factor analysis confirmed our judgment that the items we added were all dealing with the same distinct facet of communication. In the second instance two different methods of collecting information provided confirmation for one another. Wyant (1973) used several items to construct tests of various factors. He collected additional information on these same factors by structured interviews of staff members and found a close match between the information gathered from the interviews and that obtained from the questionnaire items. It is instances like these as well as (1) our reliance upon items that were useful in other studies, (2) our selection of those items that exhibited no obvious weakness, (3) our clustering of items into tests, and (4) our use of multiple tests and multidimensional scaling which increase our confidence in the utility of the data.

Patterns of Results

Our general "permissiveness" toward the data brings problems from the usual standpoint of generalizability, but this does not worry us excessively, for reasons given earlier. Be that as it may, our methodological shortcomings are the results of compromises we had to make between the real and the ideal. If one tries to maintain the integrity of the natural setting, as we did, the possibility of random selection vanishes. If one tried to maintain a long-term consultation with maximally helpful interventions, the uniformity of the "treatment" will suffer. If one hopes to gather large quantities of information repeatedly, one must be ready to compromise when respondents feel overloaded.

Because the nature of our study made it impossible for us to conduct a highly controlled experiment, it was possible that the factors we were unable to control would so confound the data that they would not bear out any of our predictions, or even make sense. However, this was not the case. Our predictions were often borne out despite the presumed lack of control -- and even when our predictions were not borne out, the analysis usually produced strong patterns that "made sense" and pointed to useful revisions of our theory.

An example of a prediction borne out by the data is the prediction that OD training improves things in schools if it is of sufficient duration so that trainees learn how to apply the new skills and use the new subsystems. At the outset, we did not know how much training would be needed to prove profitable to the schools. We were pleased to find that many schools showed improvements in several areas. The contention that schools can be improved by OD training is sustained by the consistent patterns established in the data presented in Chapters 5, 6, 7, and 8, and in the success of the cadre following training (Chapter 12). Our concern with the amount of training needed to bring about improvements is supported chiefly by the evidence presented in Chapter 6.

An example of a prediction not borne out is the prediction that consultation or training, irrespective of characteristics of the schools, will prove profitable. Chapter 7 presents the finding, surprising to some, that some training is not better than none in all cases. We presented the evidence for this relation between training and school characteristics in Chapter 5. In clusters of schools where scores on communication during emotion were lower than the district's mean, training seemed to produce negative scores on responsiveness. This pattern occurred in all three years in which trained schools existed. In retrospect, this finding "makes sense." We have known all along that organizational training sometimes "goes well" and sometimes not. However, with this evidence, we can now start to explicate those organizational attributes that are associated with successful interventions and those that are not.

One final aspect of our predictions enhances our confidence in the validity of the findings. We deliberately looked at some of the features of life in the schools through more than one source of evidence. For example, we looked at collaboration among staff through multiple-choice questionnaire items about readiness, through other multiple-choice items about actual collaboration, through the open-ended item on innovations, through the personal interviewing that Wyant did (see Chapter 6), and through reports of the cadre of organizational specialists concerning requests they received to give aid in heightening collaboration. Since these indicators are related but not identical, a subdomain of behavior can be described, and the data can turn out either coherent or contradictory.

Indeed, several instances occurred of connections between subanalyses. For example, as we noted in Chapter 10, the substudy described in that chapter confirmed our findings in Chapter 5 that willingness or ability to communicate during emotion is associated with readiness to be helpful to others during teaching.

A second example of the interrelation found among patterns was presented in the discussion section of Chapter 10. There we noted that on the whole, schools with greater amounts of training were most successful in achieving collaborative innovation. If we grant that collaborative innovation requires effective communication, this finding fits with our finding in Chapter 6 that the schools with the greater amounts of training achieved the higher levels of skill in communication.

Finally, we saw in all the chapters that school K12 always stood out with special distinction. This was the school that received the most hours of training and the most installments of training over the years -- this school's special distinction also adds strength to the pattern of evidence.

All these findings support one another; each strengthens our confidence in the others. If we had encountered different results at any point, our confidence in the remainder would have been weaker. As it is, the fact that we have extracted many patterns that are interrelated and corroborate one another provides us with reason to place greater confidence in the findings and conclusions of this study.

Summary

This chapter has presented many issues that might threaten the conclusions drawn in this study. It is our view that these matters must be taken into consideration, but that on the whole, the evidence provides too many patterns -- patterns that show stability over years, schools, and variables -- to be ignored or argued away. The strength of the data lies in their coherence, credibility, and quantity. We believe the strength of the data is sufficient to deserve attention from schools and consultants contemplating programs of organizational change.

The next chapter contains a summary of the findings of the Kent project.

Chapter 14

SUMMARY AND RECOMMENDATIONS

Runkel and Bell

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Chapter 14

SUMMARY AND RECOMMENDATIONS

Runkel and Bell

We began the Kent project with the hope that we could enhance the self-renewing capability of the Kent district and its schools. Additionally, we hoped to learn a great deal about how to bring about self-renewing capacities in schools and districts. We achieved the latter purpose. We developed many concepts that have since helped us to design OD interventions more systematically and effectively. The amount of intuition and sheer "art" in our projects, though still considerable, has gone down since the Kent project. We developed and codified many procedures that have enabled our consultation to move more sure-footedly and enabled us to teach others more efficiently how to conduct OD consultation. Some of these procedures were published in our Handbook (Schmuck, Runkel, Saturen, Martell, and Derr, 1972). Others, along with procedures we developed in later projects, will appear in the revision of the Handbook (Schmuck, Runkel, Arends, Arends, and Wyant, in preparation).

Our aid to the Kent district was not as great as we had hoped. After the arrival of the new superintendent, the use of OD methods in the central office faded and vanished. A few of our interventions with schools aborted, as did a few of the interventions of the cadre of organizational specialists. A number of our interventions in schools as well as those of the cadre showed certain important, though limited, benefits. One example was the freeing of students in a junior high school to initiate more communication. Another was clarification of discontent in an elementary school that resulted in about a dozen teachers withdrawing their resignations. In a few elementary schools, the cadre's interventions (more than ours) enabled staff to carry complex organizational innovations into stable and successful functioning. In these and one or two other elementary schools, levels of important organizational skills rose, as we have demonstrated in earlier chapters. Our contributions to the organizational functioning of the two high schools, on the other hand, were uncertain and small at best.

Despite our discontent with the extent and depth of the aid we were able to give, we think the data we have presented in this book, taken all in all, give clear evidence that the OD consultation was effective -- under certain conditions. The discovery of those conditions has been a large part of the story told in this book. These and other findings shall be reviewed in this chapter.

Our best achievement in the Kent project was the establishment of the Kent cadre of organizational specialists. They carried on a great deal of consultation on organizational matters with schools, district departments, and groups outside the district. They did this work as part-time workers during extended periods when funding was low or non-existent. Because of their persistence, the obstacles they overcame, and the success of their work, their functioning is worth studying in itself.

The Cadre of Organizational Specialists

It is difficult to compare "successes" of innovations. We have remarked in Chapter 10 on the difficulty of finding documentation of the experience and outcomes of innovations attempted by schools and districts. Aside from that difficulty, there is the perplexing question of what should be considered a "successful" innovation. The most obvious indicator of success is the length of time an innovation continues to function. But compulsory education, as an example, has been an innovation many critics now believe should be considered a "failed" experiment, despite the length of time it has continued. Similar perplexities arise when evaluating the innovative structures currently being used in "alternative schools."* We know surprisingly little about the nature of the successes and failures encountered by these experiments, because few of them have published analyses of their functioning. Even published reports usually give only impressions with little systematic data. Even fewer give quantitative comparisons with other, more traditional schools.

An example of the difficulty of reaching conclusions about the advantages and disadvantages for staff and students working in experimental schools is the case of Adams High School in Portland, Oregon. The experiment there was begun by a group of innovative educators, including the principal, that the district brought in entirely from outside. Ohme wrote pessimistically (1972) about the school, and as one evidence of its "failure" cited the fact that the original, innovative principal had been replaced by a local man who was not introducing any new practices. But after conducting interviews in the school, Schmuck and Schmuck (1974) wrote:

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* Schmuck and Schmuck (1974, pp. 253-261) have given an excellent brief review of current and promising organizational structures being tried in schools.

> We do not agree with that assessment. The current administration and staff ... are ... working out some of the disorganization problems inevitable in new programs, improving Adams' image in the Portland community, and strengthening many of the beneficial programs commenced by the former leadership staff (p. 259).

Even when assessments are written about experimental schools, as in the case of Adams, different aspirations or concerns with different aspects of the course of events can give us differing assessments of the outcomes. Which has been more beneficial, compulsory education, experimental schools, or love? It won't help to compare such very different schemes conferring such very different benefits. We must pull in the limits of our comparisons.

An innovation should be assessed in comparison with others of its same sort. In comparing the Kent cadre with other organizational innovations in schools or districts, we limit our comparison to those with the following features: (1) the innovation is one of organizational structure and function, (2) a modest amount of funding from outside (federal or other) is provided for the first year or so and then is withdrawn, (3) the local people make use of outside consultation at one or more points, and (4) the sequence of events and the outcomes are documented through several sources of information, including some quantitative data. We have made some detailed comparisons among this sort of organizational innovation in Chapters 10 and 12. Our conclusion is that the Kent cadre is among the very few organizational changes for which there is documented evidence that they functioned successfully over a period longer than a year in a manner specified by the original goals.

Implications for Initiating Change

In Chapter 4, we discussed some of the problems of changing the ways large bodies of people coordinate their activities. Particularly we believe that changing the roles and norms governing organizational behavior to be critical to the success of any change effort. From this viewpoint, we suggested six methods of initiating change that are commonly used. The first method is that of the directive or set of instructions issued by someone in authority. The second method is to exhibit the new thing to others -- to model it. Third, when changes seem especially difficult, one can bring in an "outside expert" for technical assistance. The fourth method consists of establishing the expert, or a department of them, within the organization, with their primary function being that of providing continuous service of some specified sort. A fifth method, discussed by Zand (1974), involves teaching an organization to use the collaborative mode of operation as an alternative when the usual mode is ineffective. The sixth method is the one we described in this book: establishing a special subsystem to maintain or to change the organization, as necessary. This method differs from the fourth in that the members of this subsystem do not work full time as members of the specialist team. In fact, their primary reponsibilities lie with their regular jobs in the organization.

In many ways, we believe the cadre of organizational specialists as established in the Kent district exemplifies this sixth method of initiating change. Some of the characteristics that made the cadre a unique change agent are summarized below.

In Chapter 4, we described some "rules for the cadre" that we of CASEA gave the Kent cadre. In brief, they were:

1. Draw members part-time from all ranks in the district.
2. Do not allow members to consult within their own subsystems (for example, a teacher in a school should not act as a consultant to that school).
3. Make the cadre visible in the district as a differentiated unit.
4. Obtain a budget and released time from regular duties.
5. Hold demonstrations of the skills offered and of the nature of the training offered.
6. Deal in process, not content.
7. Wait for clients to ask for consultation; do not press services on others.
8. Take subsystems rather than individuals as targets for training.
9. Collaborate with clients in planning the intervention.
10. Carry on consultation over an extended period; avoid "one-shot" consultation.

More often than not, the cadre observed all these rules. They observed some of the rules almost always, others only "whenever possible." They found two* of the rules more difficult than the rest.

One was No. 2. We have been told that there were some occasions when, upon request, a cadre member did consult in his or her own school. These few occasions did not seem to have unhappy effects. The other difficult rule was No. 4. In the end, the cadre failed to maintain its funding and its released time from the district. The failure to maintain financial support did result in serious debilitating effects. We told part of that story in Chapter 2 and another part in Chapter 12.

Also in Chapter 4, we described the kind of support we think a cadre needs from the district. Some of the points we listed are these:

1. The district should make clear in writing and in action the goals it shares with the cadre.
2. It should provide financial support.
3. It should publicize the availability of the cadre and the nature of its services, especially to key people.
4. It should exhibit readiness to support organizational change.
5. It should support the cadre's demonstrations held to promote understanding of the cadre and its functions.

In Chapters 2 and 12, we listed other features of the Kent cadre that we believe gave it strength and effectiveness. In Chapter 12,

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* In addition to the two rules mentioned here (Nos. 2 and 4), the reader might remember that the Kent cadre conducted a number of classes in communication and might correctly point to the fact that the collections of individuals in those classes were not subsystems. But the purpose of the cadre in conducting those classes was not training to change or improve organizational functioning. The purposes of the classes were those of rules 1, 3, and 5: publicity, demonstration, and recruiting.

we also made a point-by-point comparison between the Kent cadre and two other organizational change strategies in school districts.

In our view, the stellar performance of the Kent cadre is the most significant legacy of the Kent project to the art of organizational consultation. We are happy with the evidence we educed about effects of training for organizational development that we presented in Chapters 5 through 10, and glad that we could uncover some pitfalls in organizational training as well as make clear some of the sign-posts pointing along the high road. But the design and demonstrated functioning of the first cadre of organizational specialists in a school district is, we think, a model that can be adopted with easy modifications in many other districts. Properly used (see Chapter 4), a cadre of organizational specialists can greatly improve the potency of a school district in making progress against many sorts of otherwise refractory problems.

Innovations

We told in Chapter 10 what we had discovered by asking people in the elementary schools of Kent and Auburn about useful innovations that were going on in their schools. While the Kent administration and CASEA were essaying the innovations of organizational development and the cadre of organizational specialists, most of the schools in the districts were attempting innovations of their own, which were more directly related to instruction. We found that we could classify the innovations (described freely by respondents on blank lines in a questionnaire) without much strain into five categories, as follows. Structural: institutionalized group problem solving, rearrangements of power, evaluations of programs, program planning and budgeting, new and formalized committees or teams, organizational development when named as such, and the like. Collaborations in the classroom: team teaching, differentiated staffing, open architecture, Flanders' interaction analysis, and the like. Curricular: new math, remedial reading, new schedules for classes, inquiry training, ability grouping, testing or screening students, and the like. Cloistered innovations: new methods of bookkeeping or managing finances, changes in building or equipment, sending individuals off to upgrade their skills, and the like. No innovations: the respondent mentioned nothing in answer to the question. See Chapter 10 for a detailed description of these categories.

Looking at the kind of innovation reported by the largest percentage of staff in each elementary school, the first thing evident was that the schools typically meandered from one innovation to another (including periods with no innovation at all) in cycles of one or two years. Only one school in one district -- the one that had received the most hours of training in organizational development -- reported in two successive questionnaire administrations two years apart that it was primarily engaged in the more difficult structural-organizational changes.

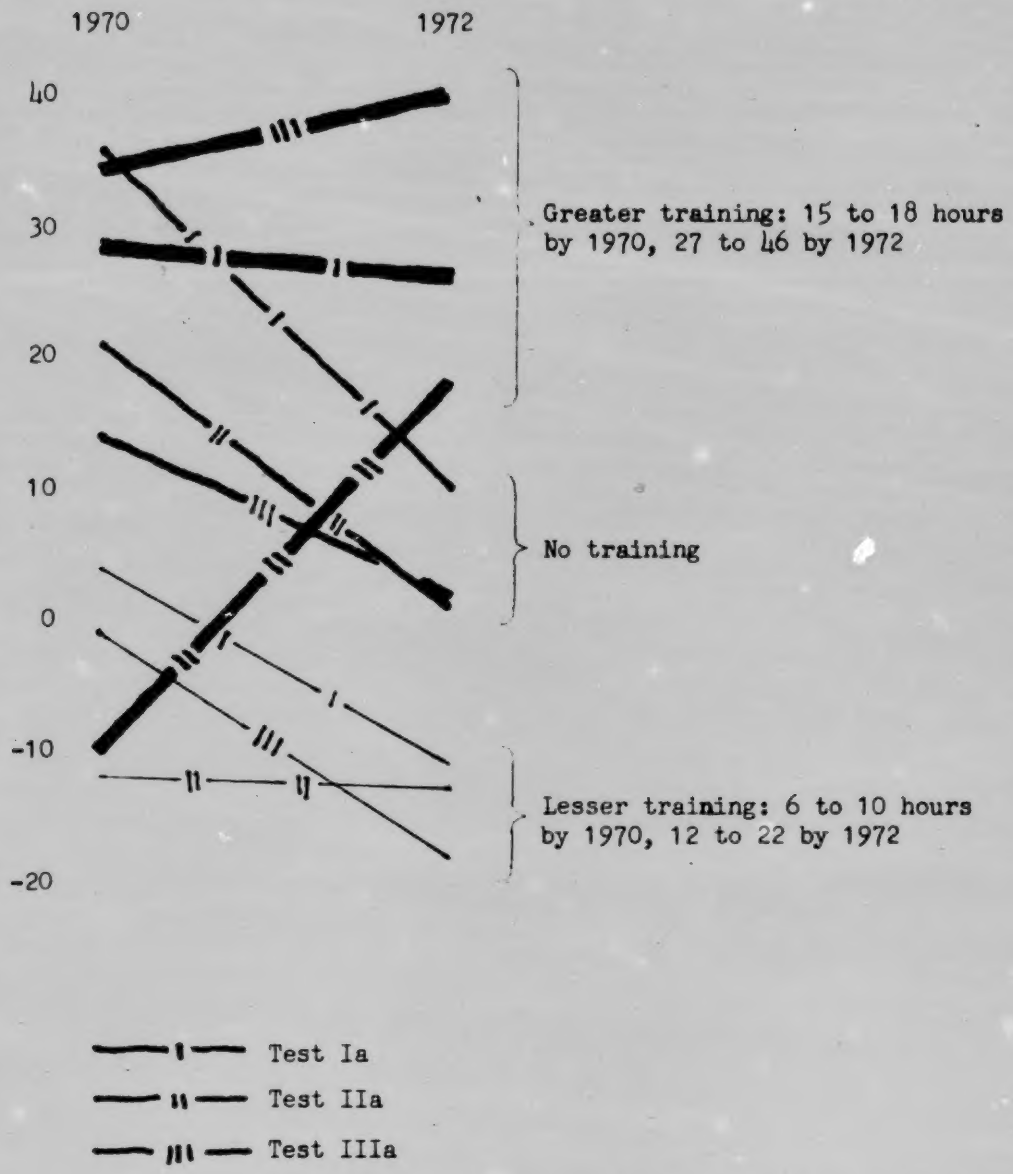
We gave special attention to the schools' efforts to adopt the collaborative kinds of innovations: team teaching and the like. We discovered that being a new school rather than an old school did not significantly accelerate the process of adopting or rejecting innovations of the team teaching sort. Nor was being a new school connected with any report of distinctive patterns of priority among the types of innovations studied here.

We did find, however, that training for organizational development made a difference in the dispatch with which a school either successfully adopted a collaborative innovation or gave up the effort. In Kent, training in organizational development gave an important amount of help to some schools in dealing relatively expeditiously with the environmental press to adopt team teaching and similar innovations. It did, however, fail to help one trained school. Among untrained schools, the responses of six out of eight indicated either that innovative activity had become minor and isolated or that communication in these schools was so poor that a sixth to a third of the staff believed innovations were in progress that actually were not.

Training Maintains Skills Needed for Innovation

In examining the way training helped school staffs to collaborate successfully, it is relevant to look at Wyant's findings (Chapter 6) about elementary schools in three districts that were showing some beginning signs of making a serious try at collaborative teaching structure. Figure 14-1 summarizes his findings about these collaborating schools. It is easy to see from the figure that among the schools with the greater amounts of training (the heaviest lines), mean scores on the three tests of communication all ended higher in 1972 than any mean of the schools in other classifications. The scores of these schools on test IIa (thoroughness in meetings) and IIIa (effectiveness in meetings) had risen noticeably since 1970, and their scores on test Ia (communication during emotion) remained relatively high. In contrast, all means of collaborating schools with no training ended lower in 1972 than the means of the collaborating schools with

Figure 14-1. Mean standard scores of collaborative elementary schools in three districts on three tests of communication in 1970 and 1972, categorized by amount of training. (Data from Table 6-6)



the greater amounts of training, and -- this is the point important here -- the mean scores of these schools with no training fell markedly on every test from 1970 to 1972. In brief, undertaking a collaborative innovation is not sufficient to bring about the improved communication that we assume is necessary to make it work. The collaborating schools with no training had temporarily elevated scores in 1970. They were clearly higher on tests IIa and IIIa -- higher even than the schools with the greater amounts of training (which at that time was between 15 and 18 hours) -- and they were only slightly under the schools with the greater amounts of training on test Ia (communication during emotion). But two years later, the schools that had received more training maintained and increased their scores on communication, while the schools without training dropped off on all three tests. Clearly, enough training for organizational development helped. (We shall describe the schools with the lesser training later in the chapter.)

Success in Collaboration

In Chapter 10, we presented other evidence concerning the effects of training for organizational development on success in achieving new collaborations or new structure. There were five elementary schools in Kent that had (1) attempted this kind of innovation, that (2) existed before the 1972 assessment, and that (3) received consultation and training for organizational development. Of these five, three (namely, K05, K11, K12) were the most successful of the Kent elementary schools in achieving collaboration or collaborative structure, according to the criterion we described in that chapter. If we grant that new collaborations or new structures require effective communication, then we note with interest that two of the successful schools were the two that had received the greatest amounts of OD training: schools K11 and K12. This fits with our finding in Chapter 6 that the schools with the greater amounts of training achieved the higher levels of skill in three kinds of communication. Since school K05 received comparatively little training, it is surprising to see it showing up as a success in collaboration by 1972; on the other hand, its degree of success was lower than that of school K12.

A fourth trained school, K13, did not fulfill our criterion for successful collaboration by 1972, but did seem (by the evidence in Figure 10-1; see Chapter 10) to have dispensed with the effort to do so with more dispatch than seven of the other nine schools that were also unsuccessful. As we said earlier, we are as happy to see a school skillful enough to reject an innovation with dispatch as we are to see it put one into action with dispatch.

The fifth trained school, K02, did not reach our criterion for collaboration and did not dispense with the effort with dispatch. This school received only a small amount of training and received it very late. This fact, too, fits the findings of Chapter 6 concerning amount of training.

Let us now return to Wyant's findings that sufficient training enabled schools that were attempting collaborative innovations to maintain and increase their communicative skills. How did this help the schools that were successful, by our criterion, in establishing new collaborative structures? We gave one part of the answer in Chapter 5: When a school had achieved a high score on ability to communicate under emotion (not all trained schools did so), then the training had a further beneficial effect; scores went up on responsiveness, one of the capabilities we think new collaborations demand. Another part of the answer is connected with the results we displayed in Chapter 8. There, we saw that a school where the staff was accurate about communication channels was much more likely to score high on collaborative decision making than a school with low accuracy about communication channels. And presumably, being accurate about communication channels requires a good deal of communicative skill. In this way, too, we think communicative skill underlies the ability to collaborate in decision making.

In sum, we think that a sufficient amount of organizational training did help schools in Kent either (1) to decide rather soon that they did not want to make a collaborative innovation and then decisively and unmistakably to stop working at it or (2) to marshall their resources and apply them to make the innovation work successfully. (See Chapter 10 for further detail.) We also think that the analyses of Chapters 5, 6, 7, and 8 tell us some important conditions that must be found or produced if innovations requiring organizational rearrangements are to have a good chance of succeeding and if training for organizational development is to be helpful in the process.

Implications for Initiating Innovations

Apparently, the skills taught during the OD training proved helpful to the staffs that later attempted collaborative innovations. We conclude that if a school is planning to undertake an innovation requiring organizational change and collaboration, then spending some time on OD training prior to the innovation itself would be time well spent. To the consultant, we recommend having the school staff spend time working on communication skills and problem solving techniques before attempting major innovative changes. These skills will become tools that will make the success of the innovation more likely. Further support for this recommendation can be found in Consultation for Innovative Schools by Schmuck, Murray, Smith, Schwartz, and Runkel (1975).

Effects of Training

Here we review the evidence on effects of the training and consultation given by CASEA, by the Kent cadre, or by mixed teams (see Table 5-10 or Appendix 5-A for the composition of consultation and training teams at the various interventions). We have already remarked about the effects of OD training on the ability of school staff to collaborate productively with one another. We shall mention below some further evidence relevant to achieving collaboration under "Variety and Readiness for Collaboration," "Decision Making," and "Amount of Training," but our chief emphasis here will be on several kinds of immediate effects of training.

Variety and Readiness for Collaboration

Saturen (Chapter 7) examined certain indicators of constructive adaptation: (1) increased perception of influence within the school staff, (2) actual collaboration in building curriculum, in selecting teaching methods, or in selecting subject matter, (3) involving students in developing rules for student conduct, and (4) incidence of undertaking innovations. He postulated that schools would do better on these indicators if (1) they were high on readiness to express variety, if (2) they were high on readiness to collaborate within the staff, or if (3) they had received OD training.

We saw in Chapter 7 that schools that were above the district's mean on both variety and readiness for collaboration and had received training clearly outdistanced all other schools. Contrary to his prediction, however, the three conditions were not simply additive in their effect. Among schools that were high on variety and at the same time low on readiness for collaboration, the outcome indicators of trained schools fell below the levels of untrained schools. Indeed, the outcome scores of trained schools that were high on variety but low on readiness for collaboration also fell below those of trained schools that were low on both variety and readiness for collaboration! His prediction was correct, however, that untrained schools low on both variety and readiness for collaboration would fall lower than all other categories on the outcome indicators.

In brief, training helped a little among those schools that were low on both variety and readiness for collaboration, and it helped a little among schools that were high only on readiness for collaboration (but low on variety), but it helped a lot only among schools that were high on both. And among schools that were high on variety but low on readiness for collaboration, training did more harm than good.

Decision Making

In Chapter 8, we focused on two outcome indicators: (1) the degree of general participation by teachers in decision making within the school and (2) the extent of making decisions in small groups in contrast to single-person decision making. In reference to their effects on these two indicators, we examined (3) the awareness in the school about communication channels, (4) the amount of communication with interdependent others, and (5) OD training.

As to simple effects of training, we found that training had positive (heightening) effects on the other four of these variables. The effects on decision making, however, were not uniform across levels of awareness of communication channels and the amount of communication with interdependent others. We found that the amount of communication with interdependent others did not have any consistent relation to the decision making indicators. A stronger effect was found in relation to awareness of communication channels. When a trained school scored high on this awareness, the scores on both kinds of decision making were considerably elevated.

In other words, when schools characterized by high levels of awareness of communication channels received training, they were able to profit from the training by increasing the use of teachers in school-wide decision making and implementing collaborative decision making at the subsystem level. However, if schools did not show a high level of awareness of communication channels, their success in employing these decision making methods was diminished whether the school had received training or not.

Task-Orientation

Part of our theorizing in Chapter 3 was that a well-functioning school is characterized by less wheel-spinning than a school with less constructive adaptability, and that OD training reduces the wheel-spinning. In particular, if people are asked with whom they talk seriously about things important to them, the trained school would show a higher percentage of people talking with others upon whom their work depends than would trained schools. Our data, presented in Chapter 8, were available only in 1972.

As predicted, the trained schools scored higher than the untrained. School K15 scored highest; it had received its training in the summer of 1970. Schools K11 and K12 scored next; these were the schools that had received the most training. Schools K05, 11, 12, 14, and 15 were the schools that passed Chapter 10's criterion for successfully establishing collaborative structure. Of these, K11, 12, 14, and 15 fell at the top of the distribution of number of task-oriented communicators named, but school K05 fell just above the bottom. School K05 was the school that received the least amount of training. In 1972, at least, the OD training seemed to have a good deal to do with the frequency of conversation with task-relevant others.

Estimating the Principal's Goals

Another deduction we made from our theory was that a staff able to work well together would understand one another's goals clearly. And furthermore, because of the pivotal importance of most principals, staff would be particularly accurate about the principal's educational goals. We gave the principals a list of educational goals and asked them to rank order the top four. We also gave the same list to staff and asked them to tell how they thought the principal would order his or her top four. We then compared the two lists of goals. In this prediction, we were all wrong. We were surprised to find that K12, our "star school," fell below the mean of other trained schools in both the years following its training; in 1972, it barely reached the mean of untrained schools. Also surprisingly, school K09, which had been low in so many distributions, fell near the top. Apparently, being able to tell how the principal ordered his or her educational goals was not as important to the functioning of these schools as we had thought.

Implications for What to Expect from Training

In practical terms, the findings summarized above indicate that before proceeding with training, the practitioner should be sure that readiness for collaboration is clearly evident. If it is, then he or she should see if readiness to express divergent views is high. If both are present training will probably be a good investment. The practitioner should beware of those schools where the expression of variety is high but where readiness for collaboration is low.

If the school staff wants to make broader use of collaborative decision making, the consultant should check to see if they are aware of the existing communication paths to important others before proceeding with training. If they are not, the consultant might increase this awareness, for example, by converting the discussions of daily frustrations and inconveniences that typically go on among friends into more task-related, problem-oriented discussions among persons who are working together. Finally, the consultant should not worry much if the staff is relatively unaware of the principal's educational goals.

Amount of Training

Our data showed us over and over again that the amounts of training we and the Kent cadre gave to the elementary schools in Kent had nicely bracketed ineffective amounts and effective amounts. The amount of training made a difference in how high the Kent schools stood on several outcome variables, and sometimes made a difference in whether schools rose above the district mean or fell below it. Also, school (K12) that over and over again stood at the top or near the top on outcome variables was the school receiving the most training between 1968 and 1972.

Increased Effects from More Training

As we discussed the effects of OD training among elementary schools in Kent and other districts earlier in this chapter, we mentioned several times the effects of greater amounts of training. We review them briefly here and add two other relevant findings.

All three of the Kent elementary schools that met our criteria for successful collaborative structure in Chapter 10 were among the five schools existing before 1972 that had striven to establish a collaborative structure. Two of the three were elementary schools in Kent that had received the most training. The third had received only a little training and passed our criteria more weakly than did the school with the most training.

Figure 14-1 showed how the schools with the greater amounts of training raised their communicative skills, in general, from 1970 to 1972, while the schools with little or no training decreased in communicative skill over the same period. In Chapter 6, we told how training began to have heightening effects on communicative skill in a school after about a couple of dozen hours.

Also in Chapter 6, we reported how Wyant examined the relation between amount of training and the amount of *gain* in communication scores a school made between 1970 and 1972. The school with the most training in 1970 (K12) improved its score on all three tests that had been administered in both 1970 and 1972; the school with the second most training (K15) improved on two tests; the school with the third most training (K13) improved on one test; and the school with the least training (K05) improved on no test.

In discussing task-orientation, we pointed out that schools with greater amounts of training were the schools in which the staff reported, on the average, talking seriously more often with task-relevant others than did the staff in schools with little or no training.

In Chapter 8, we told how OD-trained staffs in Kent elementary schools were not much more aware of colleagues with special organizational skills than were those staffs without training. Furthermore, OD-trained staffs, on the average, were not much better able to gather skilled people quickly in response to problems. But *more* training made a difference. The most-trained schools again fell at the top of the distribution or close to it on these variables, and untrained schools or schools with little training fell near the bottom.

In all these ways, it was clear that the elementary schools that had received the lesser amounts of training had received ineffective amounts, and the schools that had received the greater amounts had often received enough to make a clear difference on certain outcome variables.

We do not conclude from these data that the amount of training received even by the longest-trained school in this study is likely to be sufficient to give most schools the constructive adaptability we envision as "the capacity for self-renewal." We know from other data that school K12, which received more training than any other elementary school in Kent, began with a number of factors in its favor (some of these were mentioned in Chapter 2). In fact, we have been surprised, while analyzing the data, that the training had as much effect as it did on the other trained schools in this study.

Harmful Effects of Training

Many organizational consultants have wondered whether a little OD training might be worse than none, and not a few have been convinced by their own experience that too little training does indeed do more harm than good. We have been able in this book to put forward some data that estimate the numbers of hours that make a difference, and we have been able to specify some of the kinds of differences made by too few hours of OD training.

In Chapter 6, we set out Table 6-7, which compared the scores on three kinds of communicative skill among collaborative, untrained schools with the scores of collaborative and trained schools. The table divided the collaborative, trained schools into groups with varying amounts of training. It was clear from the table that collaborative schools receiving less than about two dozen hours did noticeably less well on two of the tests than did collaborative schools with no training at all. On the third test on effectiveness in meetings, the trained collaborative schools showed a deficiency when the amount of training was less than about sixteen hours. Clearly, too little training can do more harm than good to communicative skills.

Figure 14-1 showed these same data in another way. There, we saw again that collaborative elementary schools with too little training (the thinnest lines) showed less communicative skill than untrained collaborative schools. But we also saw that, like the untrained schools, their communicative skill deteriorated between 1970 and 1972. In practical terms, this means the practitioner should obtain commitment from the staff to sufficient time for training so that beneficial effects can occur. If a practitioner is unable to obtain this kind of commitment, then delaying any major training effort would usually be the wise course.

We also found that certain concommitment conditions depressed outcome scores. We saw in Chapter 5 that the level of skill in communicating under emotion had a decisive effect on whether OD training would be helpful or harmful on a school's level of responsiveness -- readiness to take action. When the ability to persist in communicating during emotion was too low, training actually depressed responsiveness below the level of untrained schools.

In Chapter 7, we learned how the conditions of readiness to express variety and readiness for collaboration modified the effects of OD training. When training was given to schools that were high in both of these conditions, the schools showed, in general, higher evidences of constructive adaptability than other categories of schools.

And the schools that were low on both these conditions and did not receive any training showed the lowest scores on indicators of constructive adaptability. But we were surprised to discover that among schools that were high on variety and at the same time low on readiness for collaboration, the outcome indicators for trained schools fell below the levels of those indicators for untrained schools.

Implications for Making a Contract

Our findings concerning the amount of training and the potentially harmful effects of training indicate that the practitioner should carefully assess the conditions and capabilities of the school's staff before proceeding with training and, if needed, use some strategies in the early stages of the intervention designed to ready the school for training. More is said about readiness in the next section. Also, we recommend that the consultant make clear to the client how much time is needed for training in order to ensure the likelihood of beneficial effects. If the client does not want to commit sufficient time to training and if certain conditions of readiness are not present, we recommend delaying any major training effort.

Readiness

Chapter 7 gave special attention to the question of readiness. We described there how Saturen extracted from his data the effects of readiness to express variety and readiness for collaboration on four indicators of constructive adaptability. We described these findings very sketchily just above. We can also, however, interpret several of our other findings in terms of readiness.

We showed in Chapter 5 that schools were more ready to profit from training by achieving higher responsiveness if their ability to communicate under emotion was high. In Chapter 6, we displayed the depressing effect of fewer than a couple of dozen hours of training. These effects persuade us that a school is less than ready to invest a profitable amount of time in OD unless it can commit itself to three or four days of serious work as a starter. In Chapter 8, we found that elementary schools that were aware of their communication channels responded to training with much higher scores on ability at collaborative decision making than did schools that were less aware. High awareness of communication channels can be seen as a good indicator of readiness to reap a profit in decision making from OD training. Finally, in Chapter 10, we argued that failure to establish an innovative collaborative structure probably reduced the readiness of a school for a similar effort in the near future, but the school might well become more ready for curricular innovation than it was before the collaborative failure.

Implications for Diagnosis and Raising Readiness

The importance of these readiness conditions indicates that practitioners should provide training only to those staffs that display these readiness characteristics, and should usually refrain from recommending OD training to schools that do not display readiness. However, readiness need not be left to happenstance. Though some schools may be discovered to be in a state of low readiness, they are not necessarily doomed to forego major organizational change. We believe that almost any school can heighten its readiness for change.

Saturen (see Chapter 7) has suggested techniques for increasing the readiness of schools, particularly readiness for collaboration. These techniques* are briefly summarized below.

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* The work described in this section is part of the outcome of Saturen's association with three other members of the Adams County Mental Health Center near Denver. He and Richard Helgeson collaborated in designing each strategy; Peg Blackmore and Molly O'Brian have worked with them in planning and implementing specific training designs

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Courses to introduce OD values, theory, and technology. After entry was fairly well along, Saturen and his colleagues offered two courses of thirty hours each to introduce OD to persons holding various positions within the school district. All participants in these courses were assigned the duty of developing a proposal for using OD technology to solve a problem faced in their everyday work. Each participant was required to demonstrate that he or she worked collaboratively in designing a proposal.

Workshops for curriculum development. Some members of the courses described above worked in the central office as curriculum coordinators. They invited OD consultants to help them design and implement curriculum planning sessions. In thses curriculum planning workshops, a goal-setting procedure was used to promote collaboration and discussion of disagreement. Later, those present were encouraged to confer with absent colleagues before completing their new curriculum plans.

Survey of local needs. A third strategy used for developing readiness was to offer consultation in designing and feeding back results of a needs-assessment survey. OD training was launched in several schools by asking students and staff members to indicate, on a standard form, their perceptions of their school and their wishes regarding change. In this way, the consultants gained knowledge very quickly about norms regarding variety and collaboration; this knowledge enabled them to design interventions according to readiness and the needs expressed by staff members.

Consultation with teachers to design a local workshop. Building-level workshops became the problem-solving targets chosen by several members of the original district-wide courses. Their plans were viewed as an excellent opportunity to expose all staff members within a school to the variety of their resources and to promote collaborative norms.

In-service training for developing classroom group processes. Many teachers responded to the needs-assessment surveys mentioned earlier by requesting help in classroom management. These requests were viewed as a further opportunity to promote OD by encouraging teachers to assist one another in generating multiple solutions for mutual problems. A thirty-hour course of study for groups of teachers was prepared. During group meetings, techniques were proposed for diagnosing and intervening into the social structure of the classroom. The method chosen was one developed by Richard and Patricia Schmuck (1974) to enhance the understanding of the developmental stages of classroom groups. As teachers attended to inclusion, control, affection, and adaptability within their classroom, they took notice of these needs among themselves. Teachers were encouraged to work together at developing and implementing plans for achieving self-renewal in the classroom.

Workshops for team-building. The final strategy for promoting readiness was that of offering training to groups who worked or desired to work as a team. Whenever possible, Saturen arranged to train two or more teams simultaneously so that they could benefit by watching one another and offering suggestions.

While these techniques suggested by Saturen are aimed at strengthening the norms for expressing variety and working collaboratively, we believe that the idea of providing training specifically designed to increase other aspects of a school's preparedness for organizational training can also be developed. Earlier, we pointed out that a staff's ability to communicate during emotional stress and its awareness of communication channels were also characteristics associated with beneficial effects from training. Given this relationship, if a consultant expects to provide training to a staff in which members are relatively unable to communicate with one another in emotional situations or are unaware of their communication channels, then he or she should follow Saturen's lead and incorporate specific strategies in the early stages of the intervention that are designed to improve a staff's abilities in these respects.

Levels of Skill

In Chapter 3, we set out three levels of organizational skill: (1) that of interpersonal relations, (2) that of the subsystem level, and (3) that of the system or organization as a whole. By the third, we have usually meant the school or the district. One of our hypotheses was that a minimal level of skill at each of these levels was necessary to build skill at the next level. It was our hope, as we examined the data, that we would find evidence for or against this hypothesis. Our hopes, however, went largely unanswered.

We did offer some evidence in Chapter 6 that seemed to give tentative support, not strong, to the derivative hypothesis that scores on the higher-level tests of communication would in general be lower than scores on the lower-level tests (see the section in Chapter 6 on "Levels of Communicative Skill"). Similarly, in Chapter 8 (under "Necessity for First-Level Skill"), we examined the hypothesis that high scores on the first-level tests would be necessary for schools to achieve high scores on the second-level tests. Again, the evidence was weak.

We were disappointed that we could not get persuasive evidence, one way or the other, on the hypothesis of the difficulty-ordering of the presumed levels of organizational skill. We look forward to further investigations -- our own or others' -- of this question.

Spillover

Some of the variables we have examined seem to be "enabling" variables. One example was communication during emotion (see Chapter 5). The evidence was fairly convincing that a high level of skill in communicating in emotional situations enabled commitments for action to be built, and that high skill of some other sort was not substitutable for this one. High openness to information, for example, did not enable high responsiveness to occur. This is what we mean by an enabling variable. Another example was readiness for collaboration (see Chapter 7). Our data argued that without readiness for collaboration, neither training nor readiness to express variety could help a school much in reaching certain constructively adaptive practices. In fact, without readiness for collaboration, training given to a school high on readiness to express variety could lower certain indicators of constructive adaptability. Still another example was the staff's awareness of communication channels (see Chapter 8). High awareness of this sort enabled training to have much better effects on group decision making.

Other variables seem to have the trade-off character. Increases in them seemed to help increases in other organizational skills, without much regard to the nature of the other skills, and a high level of one trade-off variable would compensate for a low level of another one. Openness to information (see Chapter 5) probably acts that way. Some of the communicative skills described in Chapter 6 probably also act this way: possibly those indicating effectiveness in meetings and initiation and reception of ideas.

We are not sure which of the enabling or trade-off variables are the most reponsible, but we saw some evidence that people in schools are able to take interpersonal or other organizational skills they learn in one subsystem and apply them in another. The skills seem to "spill over" from one subsystem to another, carried by people who belong to both.

To the Classroom

We told in Chapter 5 about the study by Bigelow, in which training for organizational development given to the staff of a junior high school showed clear effects on the later modes of interaction teachers carried on with their students, even though the training had neither included students nor given the teachers any explicit help in thinking about their classrooms. Students in the trained school initiated more talk and showed greater attraction to one another than students in the comparison school. A very similar effect has been reported in at least two other studies: Schmuck and Runkel (1970) and Gentry (1974).

To Curricular Innovation

In Chapter 10, we examined the kinds of innovations elementary schools undertook after they had spent a period with a collaborative innovation, either successfully or unsuccessfully. We concluded that schools were unlikely, after an unsuccessful collaborative effort, to try a more complex structural innovation, but that they were likely to undertake curricular innovation. We speculated that some of the skills learned during the collaborative effort, even if it was unsuccessful might have spilled over into curricular innovation, in the sense that the sheer struggle for new collaboration or structure teaches a staff that constructive communication can be carried on even during stress and the kinds of emotion people feel when under stress. If a staff reduces its fear of continuing to communicate during emotion while braving the interpersonal stresses of serious innovation, then the effect seems likely to be similar to the one we saw in Chapter 5 -- that teachers become more ready to be helpful to one another in their teaching. This readiness, in turn, should make many kinds of curricular innovation seem less forbidding.

Perhaps a practitioner can encourage more of the spillover effect than occurs naturally. After learning a skill in one group, perhaps individuals or groups could transfer more of what they learn to other settings if the consultant takes time for an explicit discussion of possibilities.

Some Misapprehensions Exposed

We think our data have something to say about several ideas that are commonplace but probably not very correct.

That Was a Good School Anyway

Sometimes, when a school undertakes a complex, difficult organizational change and succeeds, some onlooker is heard to say, "Well, sure. That school was a good school when they started. They didn't have far to go." The implication seems to be that the school was already in motion toward "good" or "better," and that therefore the observed change was almost a foregone conclusion, and didn't require much thought, much effort, or much help from a consultant. Such a view is a little right and a lot wrong.

We agree that some schools are more ready for successful organizational change than others. Earlier, we gave some specific ways in which we think readiness can be high or low. But for a school to be ready for serious organizational change with the long-term help of a team of organizational consultants certainly does not mean that the school is already very close to a lively and constructive state of adaptability.

We agree that a school with high skill in constructive adaptability seems to be capable of making a success of almost everything it takes on. It seems to meet any sort of problem with aplomb, vigor, and cheer. In fact, being able to act like that is *what we* mean by constructive adaptability. We do now and then come across a school like that, and it is a joy to behold. The school in Kent that came closest to that was K12.

But it is the very rare school that shows superior capability in many respects. It is commonplace to find one and another school that is superior in one respect. The result of this truism is that a few schools in a district are always "outstanding" -- in one respect or another. But if we look at those schools the next year and the next, the typical pattern is for the school that stood out in some respect this year to become similar to the bulk of schools the next year. In Chapter 10, we made the analogy with a cloud of gnats. The rare gnat or school is the one that can stay at the exploratory edge as the cloud moves through the changes in its environment.

Sometimes the onlooker phrases a comment something like this: "Of course they made it. They've always been an innovative school." But looks can be deceiving, The school that is constantly "innovating" can be adapting as unconstructively as one that tries to stay unchanged. In fact, if a school is known to be trying serious organizational change too often, we can be almost certain the school is merely flirting with innovation and not making any real change to a new stability. In our opinion, a series of a few serious organizational changes begun at about two-year intervals would be about the fastest rate of organizational change that could be achieved even by the toughest, most vigorous, most resourceful, most constructively adaptive school. And after three or four school-wide organizational alterations -- of the scope of team teaching or moving into an open-architecture school -- even such a school should be ready for a good rest.

New Ways of Working Together Come Automatically after You Make the Change

Sometimes, one hears the opinion that new ways of working together -- new interpersonal norms -- need not receive deliberate attention, because they will be invented, learned, and practiced by members of the organization as a "natural" part of making an innovation work. Necessity will mother invention. The attention to making explicit the modes and norms of interpersonal communication and influence that characterized the consultation and training given by CASEA and the Kent cadre is sometimes held to be superfluous, on the ground that what is needed in this respect will develop spontaneously as part of "settling-in" with the new thing.

In regard to collaborative innovations in elementary schools such as team teaching or open architecture, our data show that this view is very wrong. A great many elementary schools in the three districts attempted collaborative innovation during the years of our study. Even by the weakest of our criteria, (see Chapter 6) fewer than half succeeded by 1972. By the more stringent criteria of Chapter 10 -- still very minimal criteria -- a small percentage succeeded. The most successful of the Kent elementary schools were among those that had received OD training. In brief, leaving schools to struggle without help left the bulk of them with one or two years of wasted effort and disappointment. Giving the help of some OD training to schools, especially giving a larger amount of training, enabled a majority of them to achieve at least minimal success.

A Little Is Better than Nothing

Like some medicines, a little OD training can be worse than none at all. We gave some examples above under "Harmful Effects of Training."

To Give Others More Power, You Must Give Up Some

Power is a matter of marshalling one or more kinds of influence. When we resent influence, we think of it as a power to be resisted. When we freely invite help with a task, we think of the helper's influence on the task as a resource to us. It is possible to bring much more relevant help and influence to bear on problems than is typically the case in hierarchical organizations. When the resourcefulness of both those higher in authority and those lower in authority are brought to bear upon tasks where the talents can best be used, the total amount of actual influence in the organization will rise. In Chapter 9, we presented data telling how teachers and principals in elementary schools perceived changes in their influence from year to year. There was a large enough proportion of schools in which the total perceived influence rose that we were willing to conclude that the notion of power in schools being a "zero-sum game" is untenable.

Organizational Change Can Be Put in a Do-It-Yourself Package

In the early years of the Kent project, there was a great deal of discussion in the educational literature about "packaged" innovations. The conception seemed to be that any kind of educational improvement could be put into a self-teaching kit and sold over the counter like biscuit mix with a recipe on the box. We believe the findings set forth in this book should banish that expectation, at least in regard to complex organizational change. Conditions of readiness vary widely. The immediate goals schools have in considering change vary widely. Careful and accurate diagnosis is always necessary if harmful errors are to be avoided. As we have seen, change undertaken under the wrong conditions can do more harm than good.

There are two reasons that outweigh all others why serious organizational change cannot be packaged. One is that people have great difficulty in seeing their own communicative norms and even more difficulty in thinking of effective steps to change them in helpful directions. A group can usually change communicative norms with the help of a skillful outsider in a small fraction of the time it would take struggling by itself, even if it were lucky enough to be successful. The other reason is the principle of including the client in the planning, a principle we mentioned early in this chapter in the section on the cadre. When people help build their own plan, they have an investment in making it work -- an investment they do not have when they are asked to fit themselves into a package.

Lessons

We have listed many conclusions, findings, and "lessons" in this chapter. We end with a restatement of those we think have especial generality and with a note of hope.

Guides for any Intervention

We think the following are the core guides to be kept in mind during organizational change and while designing it. (1) New norms for communication must be practiced that demand much more immediate, face-to-face information than is customary and allow much less postponement of the communication of information or suppression of it than customary. (2) Systematic problem-solving processes that marshal the abilities and commitment of the working group must be adopted. (3) A norm of taking action (not just talking) in response to interior and exterior challenges must come about. (4) Norms and roles must be understood much more clearly and widely than is ordinarily now the case; in particular, the principal's consistency and clarity from the outset about his readiness to risk new norms is vital. (5) Procedures for quick feedback about progress toward goals must become a part of every major decision and every plan for action. (6) Ways must be found to maintain a lively effervescence of fresh ideas, even when they annoy. Again, if any one of these conditions fails to come about, the life expectancy of the innovation drops.

Readiness Guides

Distilling what we have already said about readiness, recalling the fortunes of the Kent cadre, and remembering that every school is embedded in an environment, we select the following as the core guides to assessing the readiness of a school. (1) The central office must support the school in pursuing its own leads, or at least be permissive toward it. (2) The decision to move into the innovation must be almost consensual and the decision must be recycled continually. (3) The desire for collaborative work must be strong and widespread in the staff. (4) The anticipation of some pain, with the concomitant expectation that the pain will "purchase" something that is worth it, must be widespread. (5) The staff must exhibit a willingness to entertain unusual and even embarrassing ideas from its members. (6) The key leaders must intend to stay with the school for at least two years after the innovation starts.

Humans Learn from Mistakes

We have pointed out, here and there, where we wish we had done something other than we did. We have pointed out some places where we learned some things we did not know before we looked at the data. Having recognized some of the mistakes we made in Kent, we tried to do better. We are happy to report that the rate of desirable outcomes rose in our next project -- see Schmuck, Murray, Smith, Schwartz, and Runkel (1975).

But we are especially proud to point out that the Kent cadre did better than we did. Once they had made entry into a school, their average stay there (see Appendix 5-A) was considerably longer than CASEA's. That is, they were better able than we to obey our rule No. 10, and to persuade their clients to let them obey it.

Another comparison arises from the fact that CASEA did not always leave schools in Kent with fond farewells following us. There were three schools in Kent that were more happy to see us depart than to remain (see Chapter 2). But every one of those three at some later time invited the cadre to give them consultation or training, despite the fact that many of the people were aware that the cadre had received its initial training from us! Again, the cadre outdid us.

Finally, we point out that the elementary schools with "the larger amounts of training" that figured so prominently in some of the earlier chapters received those larger amounts much more form the cadre than from CASEA. The cadre did all the training in the later years covered by this report. Even in 1969-70, the cadre put more person-hours into the work with schools than we did. Our stellar school K12 received many more person-hours of training from the Kent cadre than from us. In brief, when we have pointed to the high scores of the schools with larger amounts of training, and when we have pointed to school K12 at the top of list after list, we have pointed much more to the work of the Kent cadre than to our own work. When, in this book, the effects of OD training have stood strong and proud, there also has stood the Kent cadre of organizational specialists.

APPENDICES

ORGANIZATIONAL SPECIALISTS IN A SCHOOL DISTRICT:
FOUR YEARS OF INNOVATION

by

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Appendix 2-A

DETAILS OF TRAINING FOR ADMINISTRATORS

We described the nature of the four training events for Kent administrators in Chapter 2. Here we give more details about each event.

First Main Event: 7 to 11 April 1968

Approximately 60 persons participated in the first event, which was directed at key line administrators. The superintendent's cabinet participated for all five days, and principals and teachers joined the event for shorter times. The description of the event below derives from the trainers' report to our crew.

Sunday, April 7

7:30 p.m. We introduced the NASA consensus exercise to the cabinet, emphasizing learning to use the cabinet's resources and to clarify the roles of the cabinet members.

9:00 We led debriefing, with a report of observations by CASEA staff, questions about feelings and reactions to the exercise, and examination of how interaction during the exercise was different from the way the cabinet worked together during the year or similar to it.

10:10 Each individual drew a chart of communication and influence within the cabinet on newsprint. The sheets were then posted on a wall, and differences and similarities among the charts discussed.

11:00 The day's events concluded and the trainers met for three hours.

Monday, April 8

9:00 a.m. We continued to examine communication and influence in the cabinet. We divided the cabinet into three groups (with three persons in each) to discuss ways of initiating new programs, which of the cabinet members were influential in approving new programs, and how the manner of making decisions in the cabinet helped or hindered getting a plan adopted.

10:30 The cabinet met as a whole and each small group reported its discussions. We took a survey to identify aspects of the group's functioning that helped or hindered effective and satisfying performance of each person's job.

1:30 p.m. Principals joined the workshop. We introduced the communication skills of paraphrasing and behavior description, and gave a short lecture on intergroup cooperation. We then put the participants in small groups to practice communication skills.

2:15 We began the imaging exercise. Each role group (cabinet, elementary principals, secondary principals) listed on newsprint its images of the other two groups. Some of the images and a few of the statements under each are given below.

Cabinet's images of secondary principals

1. Argumentative, passively resisting, distrustful.
2. Genuine concern for kids and image of district.
3. Negative toward the increasing cabinet power and increased influence of program specialists, advisers and negotiating teams.

Elementary principals' images of secondary principals

1. They have more influence with cabinet than we do and feel their position is more responsible than ours.
2. They get benefits for students that we don't.
3. They don't communicate with us, especially about continuity of curriculum.

Cabinet's images of elementary principals

1. Genuine concern for kids and image of district.
2. Lack human relations skills and management skills.
3. Are cooperative, receptive to supervision, realize inadequacies, and are less negative than secondary about their decreasing influence and lack of direct access to superintendent.

Elementary principals' images of cabinet

1. Approachable as individuals but not as a group.
2. Avoid decisions we need, don't always communicate decisions; or we get information from one individual and don't know whether he speaks for cabinet.
3. Little unity, many conflicts of interest in cabinet.

4:15 p.m. We introduced skills of checking one's impression of another's feelings and of giving and receiving help; participants then practiced these skills until the afternoon session ended at 5:00 p.m.

7:30 Images were shared by the total group: one member of one role group described one image of another role group, and a member of the latter group then paraphrased it. This process continued until all images were shared.

9:30 Each role group met separately to find examples of its own behavior that gave the other group its impression. Representative examples were:

Secondary principals' response to cabinet

1. We're not argumentative! We don't initiate contacts with cabinet members.
2. We participate in civic activities and have tried to recognize student achievement.
3. We have made complaints to cabinet members about things we don't like.

Secondary principals' response to elementary principals

1. Yes, we think our position is more responsible than yours, and we do have direct contact with the superintendent.
2. We have lower teacher/student ratios, more counselors, more money per student.
3. We haven't initiated joint planning, or consulted elementary level when creating our own program.

Elementary principals' response to cabinet

1. We're child-centered and we communicate with parents and community.
2. We don't use objectives in supervising teachers.
3. We've accepted some specialists and programs, and resigned ourselves to others, we have regular meetings, and are willing to ask for help.

Cabinet's response to elementary principals

1. Yes, we're approachable.
2. We have delayed decisions you need to have made.
3. We have different views of each others' roles.

11:00 p.m. The session ended and trainers held a staff meeting.

Tuesday, April 9

9:00 a.m. Role groups met separately to complete review of examples of their own behavior.

10:00 All groups met together to share the examples. The session continued until noon.

1:00 p.m. Teachers joined the workshop, and all participants were divided into small groups for more practice in communication skills.

1:45 We divided the participants into six groups for exercises that highlighted the use of group resources, problem-solving approaches, and giving and receiving feedback.

2:00 We assigned some teachers and principals as observers for the exercises and gave instructions.

2:30 The six groups performed the task.

3:30 Observers reported to each group, and participants debriefed the exercise and the group's processes.

4:45 The total group met to debrief the afternoon's work and to discuss learning about working in groups.

The session ended at 5:00 p.m.

7:00 p.m. We introduced the problem-solving sequence and divided the participants into six groups, with every role represented in all groups. The groups identified problems, did a force-field analysis, brainstormed solutions, and made plans. Some of the work on some of the problems is described below.

Personnel Evaluation

The group suggested ten alternative ways of improving evaluation, brainstormed a list of activities for each suggestion, and made a force-field analysis. Among the negative forces (which made problem solving difficult) identified were a lack of training, lack of leadership from top administration, the difficulty of being objective in evaluations, confusion about the purpose of evaluation, lack of policy and money and time.

Planning for Integration

The group identified its problem as the need to develop teacher-administrator relations to facilitate problem solving. It identified positive forces such as shared goals and commitment, and frequency of communication. It identified negative forces such as lack of trust, lack of helping skills, role unclarity, and the press of time and other duties. The group brainstormed 18 suggestions and settled on (1) ways to reduce demands on the principals' time, and (2) creating ways for teachers to support one another.

Professional Organization Participation

The group, after discussing possibilities, settled on the problem of the lack of active participation in professional organizations.

It identified positive forces such as good leadership, social events, and benefits from membership; and it identified negative forces such as power conflicts, poor communication, and outside pressures.

The group brainstormed 14 alternative solutions.

9:45 Each small group debriefed its own processes during problem solving for approximately an hour.

10:45 p.m. The CASEA staff met again.

Wednesday, April 10

9:00 a.m. Teachers and cabinet members (the principals were no longer present) formed new groups to share the results of last night's work and to discuss ways of implementing the solutions.

10:00 The cabinet, secondary teachers, and elementary teachers did the imaging exercise following the procedure used earlier with the cabinet and principals. Some representative images were:

Cabinet's view of secondary teachers

1. Feel they're important, are status-conscious, are independent, politically-oriented.
2. Reject administrative decisions.
3. Spend fewer hours in classroom than elementary teachers, have less contact with parents, are paid more for extra-curricular activities.

Elementary teachers' view of secondary teachers

1. Don't communicate with us in curriculum matters, but communicate well among themselves.
2. More active in professional organizations but also encourage us to participate.
3. Don't take time to understand elementary problems and look on us as less sophisticated than themselves.

Secondary teachers' view of elementary teachers

1. Not as argumentative as secondary, and follow the lead of their principals.
2. Don't respond to education association newsletter or accept nominations to association committees.
3. Child as opposed to subject-centered.

Elementary teachers' view of cabinet

1. Calls meetings for teachers outside of school hours but during working hours for administrators.
2. Segregated from other parts of district, aloof and distant from teachers.
3. Too quick to evaluate, too rigid to change, request teacher opinion but don't use it.

After the three groups completed these lists, they shared their images with the other role groups. The groups also made lists of their images of themselves, but these lists are not presented here. Each group next met separately to make lists of examples to support the other groups' images of them. Some representative examples were:

Secondary teachers' response to cabinet

(Our records show that generally the secondary teachers put "OK" on the newsprint as a response to specific impressions of the cabinet; our records of their responses are otherwise not very enlightening.)

Secondary teachers' response to elementary teachers

(Our records are not enlightening.)

Elementary teachers' response to secondary teachers

1. We do not voice opinions and ideas at meetings, react to an issue as a block -- reflecting what principal might have voiced previously.
2. We do not write many letters to the newsletter or make other contributions.
3. Thanks -- we are child-centered!

Cabinet's response to elementary teachers

1. Several meetings listed.
2. We're also mentally segregated by chain-of-command
3. Cabinet members haven't spent much time in classrooms.

The exercise continued throughout the day. Following a two-hour dinner break, the imaging continued throughout the evening and ended at 10:00 p.m.

Thursday, April 11

9:00 a.m. We and the cabinet -- the teachers' part of the workshop over -- held an unstructured discussion of roles and communication in the cabinet.

1:00 p.m. The discussion continued throughout most of the afternoon.

3:00 The group discussed plans for future training, and the heads of the Business department and Curriculum division requested training for their staffs.

3:30 Discussion of roles and communication continued.

4:30 End.

Second Main Event: 24 to 26 September 1968

Approximately 70 district personnel with key staff positions attended the second event, a three-day workshop for the Student Personnel Services and Curriculum Development Divisions of the district. The trainers' report of the event is a lengthy narrative; here the report is severely shortened.

Tuesday, September 24

9:00 a.m. One of our crew gave a general introduction and explained the first exercise. Participants were randomly assigned to small groups to share personal expectations for the workshop. They readily did so, but discussions of the groups' processes were inhibited.

10:00 Newsprint lists of the goals were posted. Generally the goals were: better communication, role coordination, and understanding; improved norms, use of resources, and understanding of group processes; and personal growth.

10:20 In a fishbowl, group representatives shared the goals. A second fishbowl formed to discuss group processes during the morning; observers' reports describe the discussion as superficial.

11:30 In another fishbowl, trainers compared the groups' goals and their own and found them generally similar.

1:30 p.m. Each division met separately. Trainers introduced and modelled paraphrasing and behavior description.

1:50 People with similar jobs met in small groups to practice communication skills; the practice seemed artificial and mechanical to observers.

3:20 Again meeting with members of their own division in small groups, each person listed (a) helping and hindering behaviors toward himself, and (b) his own behaviors that helped or hindered others. The groups then discussed the lists. While the discussions in some groups appeared to be open, in others negative feedback was conspicuously avoided. This exercise continued throughout the afternoon.

7:00 After dinner, groups of job-related people discussed helpful and unhelpful aspects of the day.

8:15 Representatives from the groups met in a fishbowl to review the day. The issue of organizational vs. "sensitivity" training emerged; it was to continue throughout the workshop.

8:40 The trainers met in a fishbowl to evaluate the workshop's progress; nobody responded to an invitation to participants to join the discussion. It ended at 8:45.

Wednesday, September 25

9:00 a.m. We divided the participants into six groups of those with similar job responsibilities, and introduced the "Planners and Operators" exercise. The planners had 45 minutes to devise and convey to the operators instructions for the solution of a simple puzzle. The exercise took the entire morning. During debriefing, participants shared useful feedback with each other and drew parallels between the task and on-the-job work.

1:30 p.m. The two divisions met separately, and we further divided participants by similarity of jobs. The task was to construct a Tinkertoy model to represent relations within each small group and the group's relation to the rest of the division. Each group then described its model to the rest of the division. In debriefing the exercise, trainers noted that participants were generally very involved in the task, were ingenious in using Tinkertoys to represent the divisions' structures, and discussed in depth specific status relationships.

3:00 Each division met as a large group. The task was to form a series of "living sociograms" that depicted various sorts of relationships within each division. Each participant milled about the room until he felt his location expressed his relationship with others accurately. Each division was to represent first (a) the amount of two-way communication, then (b) power and influence, then (c) interdependence, and then (d) feelings of closeness or distance. Student Personnel Services did the first two, and Curriculum the first three. The trainers felt that the exercises produced only moderately useful information, and were generally not worth the time they took.

One group within Student Personnel Services began confronting the director about communication problems during the debriefing, but another large group did not want an emotionally-charged confrontation. The polarization and confrontation continued throughout that evening.

7:00 p.m. Our plan was to begin imaging between the two divisions as a warm-up for the arrival of the principals the following day. Because of the tensions within Student Personnel Services, we decided to let the divisions again meet separately.

Curriculum

The division's task was to set an agenda for itself for the evening. The halting attempts to do so brought out issues of dependency upon authority and indecisiveness until one small group abruptly began imaging others. Debriefing focused on the group's difficulties in decision making, in indirectness, and avoidance of conflict.

Student Personnel Services

We introduced the problem-solving sequence, but the confrontation-minded group called for a personal confrontation agenda in an unstructured fashion. About 20 people (but not the director) went to a separate room with two trainers; after 10 minutes one trainer decided that the group could handle a constructive confrontation and got the director to join the group. While the main group worked on the problem-solving sequence, the confrontation group first worked through mere outpouring of feelings and then began a more constructive course of making agreements to improve relationships.

Thursday, September 26

9:00 a.m. Principals joined the workshop and we introduced the imaging exercise. Some representative images:

Principals' view of Student Personnel

1. They're in the clouds (theory-oriented) while we're on the ground (practically-oriented).
2. Set themselves apart, don't share information or take on duties (e.g., lunchroom) like teachers.
3. Dictate rather than recommend solutions.

Student Personnel's view of principals

1. Don't call on specialists for help.
2. Violate district policy, e.g., on discipline.
3. "Rewrite" specialists' job descriptions.

Principals' view of Curriculum

1. Move too fast, changes come down from top, don't ask for ideas from teachers.
2. Lack of communication between specialists and principal, don't tell us what they're doing.
3. Share our philosophy on curriculum development.

Curriculum's view of principals

1. Don't show us examples of good teaching so we can use ideas.
2. Don't call on us enough to discuss curriculum problems.
3. Cooperate with us by discussing curriculum and scheduling problems.

10:20 Newsprint lists with images were posted. Images were shared in the total group. The trainers reported that there was fairly low involvement in the exercise and that few new channels of communication were opened. The session lasted until noon.

1:30 p.m. Principals left and the two divisions again met separately; Curriculum continued problem solving, one group in Student Personnel Services continued the confrontation, and the other continued problem solving. Some results of the problem solving:

Curriculum

Needs of the Deviant Child

The group identified the lack of programs for "deviant" children as the problem and "provide programs for all children" as the goal. It identified hindering forces such as lack of teacher training, under-use of resources, public apathy, and uncertainty of diagnosis; and positive forces such as existing programs and resources, concern by public and staff, and financial help from state and federal governments. It suggested plans (rather vaguely) to analyze clients, develop a program, get materials, develop teacher training, and get public acceptance.

Committees

The group identified apathy toward curriculum committee work as the problem and commitment as the goal. It identified hindering forces such as lack of time and place to meet, no immediate reward, and lack of awareness of the importance of the work; and helping forces such as ability to exercise influence, rewards for committee work, and opportunities for sharing ideas. It recommended fairly specific action plans such as setting up a calendar, renovation of the instructional materials center, and communication skills workshops for committees.

Student Personnel

Communication

The group identified lack of communication between central office and building administrators and supervisors as the problem, and an adequate flow of relevant information between the two role groups as the goal.

It identified negative forces such as personal fears about what supervisors might say, time pressures, and distrust; and positive forces such as good relationships, and supervisors' apparent willingness to help.

The group suggested some action plans, mainly more openness by themselves, and scheduling meetings of the people involved.

Communication

The group identified poor communication with the division's director as the problem and good communication as the goal. It identified hindering forces such as the director's style and unrealistic expectations of some group members; and positive forces such as the director's request for help, resources of various people, and an attitude of willingness to help. The group recommended a number of solutions, mainly the use of communication skills, better feedback and encouragement for the director to be open.

The Confrontation Group

Meanwhile, the confrontation group was assessing its problems and goals. Some agreements for improving relations were made; one trainer reported that although problems had not been resolved, there was greater empathy in the group, and more information about the nature of the problem.

4:30 p.m. Both divisions met together for a general debriefing of the three days. Several participants felt that principals had not been serious about imaging, while others were pleased with the morning's results. The general reactions to the workshop seemed to be favorable, and several persons mentioned gains they or others had made during the laboratory. There was some discussion of future work with CASEA, but no definite plans were made.

Third Main Event: October 1968

The third event, a short session for teachers, the cabinet, and school board members, was rather hastily planned. The main record of our effort is the transcription of a tape recording of a debriefing session held by the trainers. Other than illuminating the content of some exchanges about interpersonal behavior, both facilitating and restraining, that occurred, the transcription adds little to the description of the event in the text.

In May 1969, the director of the Curriculum Development Division sent us a copy of the policy and the report of the joint committee of the administration and education association. In the accompanying letter he said:

> I believe that the work that CASEA has done in our Kent School District has made it possible for the administrators and the KEA (education association) to work more closely together than they would otherwise have been able to do in this task of developing a policy that will meet the needs of students for relevant experiences in such a way that it will have the support of the vast majority of our public.

Four problem-solving groups, each containing at least one representative of all three role groups, met on the first evening. Some representative products of their work:

> Group 1
>
> The group described "preparing students and teachers" (for dealing with controversial subjects and speakers) as its problem. It identified several desired states, such as clarity of policy, freedom to teach, freedom to hear controversial speakers, and freedom from community or group pressures. It identified hindering forces such as poor parent-student communication, feared loss of community support, and distrust; and positive forces such as "students well-prepared," "objective parents," and the like. It discussed those negative forces that could be changed, and recommended the adoption of a form that described the proposed presentation as its main solution.
>
> Group 2
>
> The group took "the criteria and process for selecting an outside resource person" as its problem. Our only records of the group's work are a few suggestions for solutions.

Group 3

The group identified "plan of action for peer group rebellion" as its problem and listed a number of desirable states such as "student being broadened and able to assess issues objectively" but also undesirable states like "immorality, indoctrinated, disoriented." It listed many restraining forces, such as "students believe system is hypocritical (this reinforces it)," immature parents, adolescent challenges of authority, and the like; and helping forces such as controlled environment, respect of school district, and proper preparation by students. The group listed ways of reducing restraining forces such as giving students more influence, explaining the proposed policy on controversial issues to students, and the like.

Group 4

The group listed "communication between community and school" as the problem. It identified hindering forces such as fear of loss of revenue, "some teachers using schools to meet own needs," and peer influence; and positive forces such as students' desire to become involved in school decisions, parental influence, and "teachers and school system." It brainstormed 18 ways of reducing negative forces, including increased communication between all parts of the school community as the major theme.

Fourth Main Event: December 1968

Our final training event for administrators was a short laboratory for members of the Business Department. The event was modestly successful, and our records have little to add to the description of the text. The design presented below was for all practical purposes followed in the event itself.

Training Goals: (1) Develop a group norm for openness about organizational and interpersonal problems. (2) Increase members' skills in communicating and problem solving. (3) Increase role clarity among the group members. (4) Involve the group in beginning to solve internal problems and problems it is having with other parts of the school system.

Wednesday, December 11

9:00 a.m.	Introduction by Schmuck
9:15	Five Square Cooperation Exercise
10:15	Coffee
10:30	Participants identified group and organizational problems in the Business Department. Skill exercises of paraphrasing and behavior description were introduced as part of this exercise. The group was divided into subgroups of two or three which attempted to generate problems that they saw existing within the department. The problems were to be stated in behavioral terms and others were to paraphrase in order to show that they understood what the problem was. CASEA consultants suggested certain areas of problems not covered by the group: (1) role clarity and ambiguity, (2) effectively using one anothers' resources, or (3) closedness and low participation.
12:00 p.m.	Lunch
1:30	Force-field analysis. The most important problems were defined and placed in the framework of a force-field analysis. Subgroups worked on such analyses and fed their results back to the total group.
3:15	Brainstorming action alternatives.

Thursday, December 12

9:00 a.m.	The group made plans for improvement. The results of the first day were summarized and plans were made for changing group procedures to improve the internal functioning of the department.
10:15	Coffee
10:30	The group identified problems that exist between the Business Department and other parts of the school system.
12:00 p.m.	Lunch
1:30	The question was introduced: "How should the Business Department prepare to respond to these problems?" The following steps were discussed: (1) Goal setting, (2) Projected force-field analysis, (3) Brainstorming ways to reduce the projected restraining forces, and (4) Planning for action.

Five of the seven participants responded to a short questionnaire we sent them in February 1969. They reported better oral communication, especially in the newly-begun weekly meetings; more understanding of their jobs by others in the division; better understanding of others' jobs; and made suggestions for increasing understandings of others' jobs. There is nothing else of interest to report about the event.

Appendix 3-A

Some Important Variables

The foregoing theory has strong implications for all phases of interventions. In this section, we shall divide the phases of interventions and their effects into these:

1. Scouting and entry
2. Contract building: Establishing relations between intervener and client
3. Conditions during transition and training
4. The intervention proper
5. Effects on first-level skills: Individual and interpersonal
6. Effects on second-level skills: Organizational practices in subsystems
7. Effects on third-level skills: Outcomes or end-products

In this section, we shall list very briefly some variables that have been brought forward as important, in our judgment, by the work of the program on Strategies of Organizational Change at CASEA. Ideally we would argue for the "importance" of these variables by tables of the amount-of-variance-accounted-for in a series of studies with systematically and balanced clusters of controlled and varied variables. Because most of our variables have been of a sort that do not yield data susceptible to analysis of variants, and because the specification of conditions under which the variables have been assessed have not been very precise, we must select the "important" variables by less quantitative means. Many of these variables, nevertheless, have responded to predictions with statistical significance in the data of the Kent project or in other projects (or both). We shall note applications of these variables as we go along.

We shall include some variables in this list that we have never measured, neither in the Kent project nor elsewhere. We shall do this because, as we look back over our research, a certain logic appears here and there that suggests variables that might be very useful in the future even though we have not explored them yet in our own work. If we list them here, other researchers may help us by trying these suggested variables in their own work.

Conditions at Entry

During entry into a prospective site for organizational change, and during diagnosis, sufficient information must be gathered to enable a training design to be built that responds to actual conditions at the site. Furthermore, diagnosis will sometimes show such low readiness for change that the intervener will decide not to risk an intervention. The intervener may even say to the client "Don't do it."

In diagnosing readiness for change, the intervener will hope to find some dissatisfaction, enough so that at least some influential members of the school or district are casting about for some way of changing things. At the same time, the intervener will hope that a good number of members will estimate the probability of benefit from change to be high enough to motivate a tentative commitment to the project. If either present satisfactions are too high or estimated probability of successful change is too low, the intervener will decide either to withdraw or to undertake a project to heighten readiness before starting the main change project. We gave an example of heightening readiness when telling the story of school K31 in Chapter 2. Some other suggestions for heightening readiness appear in Chapter 7. Jones (1973), Murray (1973), Smith (1972), Smith and Keith (1972), Starling (1973), and Wacaster (1973) have all told stories of school staffs in which the "subjective expected utility" of the innovation was too low. (The studies by Murray, Smith and Starling are condensed in the book by Schmuck, Murray, Schwartz, Smith, and Runkel, 1975).

The intervener will also hope to find indications that subsystems will remain fairly stable during the period of training and consolidation of new norms. If the staff of a district is to be sharply reduced in number, training just before or during the reduction will be futile. If those in influential positions are to change -- such as superintendent, principal, or a strong informal leader -- special periods of retraining will have to be designed. Often, when a key person changes, the condition of readiness for further work in district or school becomes unfavorable, even hopeless. During the abortive projects in differentiated staffing studied by Jones (1973) and Wacaster (1973), the schools changed their principals before the new norms became established. Simons (1974) has described the effects on a school that had successfully used OD training when a new principal, without skills even of the first-level sort, took over.

At the subsystem level, the intervener will ascertain the amount and distribution of second-level skill already present and design the training accordingly. The intervener will also get what indications he or she can of the third-level skills of the school or district so that he or she can estimate how far the organization has to go before it becomes constructively adaptive.

The variables listed below are indicators, we believe, of the conditions we have described that are important for diagnosis during entry. In the language of evaluation, these variables will usually be considered to be independent variables within context evaluation. Some might double as dependent variables; that is, indicators of effects or outcomes (near or far) of training. Many of these variables are interdependent and interrelated in complex ways. As such, their measurement will be difficult to obtain and interpret.

A-1. Degree and distribution of emotional and cognitive readiness for collaboration. How many members are ready and eager to collaborate and just how ready and eager are they? If organizational members are fearful of collaboration or if they do not understand much about what it would demand, readiness is low. Here we have actually thrown four variables into one: Degree of emotional readiness, degree of cognitive readiness, distribution in the organization of emotional readiness, and distribution of cognitive readiness. Readiness can be assessed at interpersonal, group (subsystem),or organizational level. The same three levels of assessment apply to other variables below. See Chapter 7 for findings about readiness for collaboration.

A-2. Present *skill in collaborative work* and its distribution in the organization.

A-3. Degree and distribution of *readiness to bring personal resources into view*. See Chapter 7 for findings about this sort of readiness.

A-4. Present *skill in calling forth personal resources* and the distribution of the skill.

A-5. *Degree of responsiveness* -- the readiness to take action, to commit oneself, to take the risk of irreversible action. See Chapter 5 for findings.

A-6. The degree of *conflict* existing -- the extent to which organizational members act as if solutions to problems are win-lose, and the degree of gain or loss they believe to be at stake. Conversely, the amount and distribution of existing skill in dealing constructively with conflict and pain. The measure of "agreement to value variety and disagreement" described in Chapter 7 taps this variable.

A-7. *Expected continuity of subsystems* and of persons in positions of leadership and administration -- will they be there throughout the period of change and stabilization? This is especially important when the power in the system or suprasystem is centered in one or a few persons, as in the case of principal or superintendent.

A-8. Degree and distribution of trust (confidence) in other individuals (with special attention to leaders and administrators) and in other groups or the system as a whole in respect to their readiness to give information about relevant matters such as happenings in school or district, feelings (emotions) toward actions of persons or groups, technical information relevant to the work, prognostications about the future, etc. -- in brief, *trust or confidence in others' use of their information power*. (For the conceptualization of information power and other sorts of power mentioned below, see Collins and Raven, 1969, especially pages 166-168.) This cluster of variables includes the trust prerequisite for skill in communication at the first and second levels. It also includes trust in the group to which the other is perceived as belonging -- ethnic group, community, etc.

A-9. Degree and distribution of trust (confidence) in other individuals and groups in the system in respect to their readiness to give punishment or reward for conforming to present norms or for adopting new norms -- that is, *trust in others' use of their coercive and reward power*. A factor limiting this trust is the person's clarity about the norms and about the degree and distribution of support for them among others. If organizational members cannot state norms clearly, or if they find support or disconfirmation of a norm in unexpected places in the organization, they will receive rewards and punishments in what they consider haphazard or unfair patterns.

A-10. Degree and distribution of trust (confidence) in other individuals and groups in respect to their dependability as models or guides. Do members want to throw in their lot with the others and become like them? This is a sort of motivation to belong. *Trust and acceptance of the referent power* of others.

A-11. Degree and distribution of trust (confidence) in other individuals and groups in respect to their expertness -- their knowledge and work-relevant abilities. Trust in others' use of their expert power.

A-12. Degree and distribution of trust (confidence) in other individuals and groups in respect to their legitimacy. Are they full members of the organization? Do they have a proper claim on one's attention, time, and effort? Trust in others' assertion of legitimate power.

Here is a note about new and old schools. We often think a new school has a better chance of changing than an old school. We think so because we think it likely that certain variables listed above are more likely to be at favorable levels. When a staff has never before worked together, interaction patterns do not yet exist in which to assess levels of these variables. But at least the staff has not had unfavorable experiences that would have lowered their readinesses. Most of the diagnosis for a new school must await the first few meetings of the staff, at least.

Relations Between Outside Consultants and Client

These are probably chiefly "input variables." The intervener and client need to check to ascertain the extent to which a favorable relationship is achieved. That is, there will be assumptions at the outset about purposes, functions, roles, existing conditions, and so forth, and about how intervener and client fit into them. These are bases upon which further work is built. In judging later effects, it will be important to be confident that assumed conditions, roles, and so forth actually did exist. This is the point made by Charters and Packard (1974) and by Runkel and McGrath (1972, pp. 210-215). Some of these input variables will change in level as the intervention continues, and in that way can be examined as effects of dependent variables.

B-1. Degree of clarity of shared understanding between client and interveners concerning who is the client -- that is, concerning who has the rights and prerogatives of the client. Whose "agents" are the interveners?

B-2. Degree and distribution of trust (confidence) felt by the client in the interveners in respect to the interveners' readiness to give relevant information about their own purposes and about the likely course of the intervention -- in brief, trust or confidence in the interveners' use of their information power. This includes trust in the group or population sector to which the client sees the interveners belonging -- ethnic group, scientific coterie, professional allegiance, etc.

Note: Individuals can give less weight to their own interaction with interveners than to the interveners' interaction with the subsystem. Sometimes, even if an individual feels personally misled by the interveners, the individual will tentatively continue to participate in training if he or she believes the interveners are treating the group as a whole competently and honorably.

B-3. Degree and distribution of trust (confidence) in the interveners in respect to their readiness to punish or reward members of the client group for conformity to the interveners' norms and goals -- that is, *trust in the interveners' use of coercive and reward power*. This includes the possible collaboration of the interveners with administrators or other powerful persons in the client's own organization to reward or punish participants. Obviously, this is not simply a matter of more reward or punishment being good or bad. As interveners, it is true, we do try almost always to avoid being punitive, and we always try to avoid being used by administrators as agents of punishment. On the other hand, we try to make constant use of our reward power in judicious ways. Especially, we seek to make the change process rewarding -- not to make rewards contingent upon our presence. This is complex and not easy to measure.

B-4. Degree and distribution of trust (confidence) in the interveners in respect to their dependability as models or guides. Do clients want to take on the interveners' skills, norms, and values? *Trust and acceptance of interveners' referent power*.

B-5. Degree and distribution of trust (confidence) in the interveners in respect to their expertness -- their knowledge and work-relevant abilities. *Do participants have confidence in the interveners' competence and in their use of expert power?*

B-6. Degree and distribution of trust (confidence) in the interveners in respect to their legitimacy. Is it proper for these interveners to be presenting themselves as such? Do they have the imprimatur of relevant groups or authorities? *Do clients have confidence in interveners' legitimate power?*

Note: A factor in accepting expert power and legitimate power that we have encountered is that senior members of the intervention team are usually perceived as having more legitimacy than younger members.

B-7. *Degree of initiative on the part of participants in making use of the interveners* versus behaving passively toward them and always waiting to be told what to do next.

Conditions During Transition and Training

These variables indicate conditions that may not be ascertainable at an early stage of entry and diagnosis or may not be important then, but become important once transition and training get under way.

C-1. *Subjectively expected utility*. This is an appraisal clients make by adding the benefits they are probably getting now to their estimate of the cost or pain of bringing about the change, and subtracting these from the benefits they think are likely to ensue from the change. This kind of thinking is treated in the psychological literature of "utility theory." If the person perceives that certain benefits (b_i) are *at present* possible, each with a probability of p_i, and that certain costs of making the change (c_j) are possible, each with a probability p_j, and if he or she expects that certain benefits (b_k) will ensue *after* the change, each with probability p_k, then his or her subjectively expected utility (SEU) for making the change is

$$\mathrm{SEU} = \sum_k b_k p_k - \sum_i b_i p_i - \sum_j c_j p_j .$$

This conception explains what is ordinarily called "resistance to change." If the person estimates possible benefits, costs, and losses, with their attendant probabilities in such a way the SEU comes out negative, then he or she will, quite rationally, not wish to make the change. The greater a person's SEU, the greater will be the person's feeling of investment in the change project, and this is equivalent to his or her feeling of "owning" the change project or what people usually call commitment.

Some of the variables listed below are components or partial determinants of SEU and will therefore show some correlation with it. But none of the variables listed below is quite equivalent to SEU.

C-2. Degree and distribution of support from supra-systems -- that is, support from the school or principal for a team of teachers, support from district administrators for a school's change efforts, and the like. Support can be given in the form of money, equipment, released time, public announcements of approval, etc. This support can be delicate and crucial when power is centered in one or a few individuals, as in the case of principal or superintendent.

C-3. Degree of common understanding of the goals and nature of the proposed change. If the proposed change includes finding and formulating the nature of the proposed change, in contrast to having a clear design for the desired outcome beforehand, then it is important to have a common understanding that transforming vagueness into a coherent plan is a part of the task.

C-4. Degree of *independence of the subsystem* undergoing change from other subsystems and from its suprasystem.

C-5. Degree and distribution of *trust* (confidence) *in emergent leaders* or leaders newly appointed for subsystems in respect to *their use of information power*,

C-6. ... *their coercive and reward power*,

C-7. ... *their referent power*,

C-8. ... *their expert power*, and

C-9. ... *their legitimate power*.

Characteristics of the Intervention Proper

These are independent variables. It is true that interveners will choose certain features to incorporate in their intervention design according to their diagnosis, and in that way design features can be *dependent* on conditions existing at the outset. But we are treating these variables as offering characteristics that the interveners choose to bring about desired effects or outcomes on the part of the *client*, and that makes them, formally, independent variables.*

Within the Kent project, we do not have the capability of assessing very many of the variables listed here. We list them for the sake of completeness and for possible later use.

D-1. *Type of intervention*: (a) none, (b) demonstration,

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*For the purposes of this book, we are dealing only with interventions having the nature of OD training.

(c) training proper, or (d) guided action.

D-2. Origin of intervention: whether (a) requested by the client, (b) by a subsystem or suprasystem connected with the client, or (c) by the intervener. If (a) or (b), by what parts and how the origination was distributed within the part.

D-3. Content-target of the intervention: whether (a) for information-sharing, as in discussions during entry, (b) for contract-building between client and intervener, as in discussions during entry or in a demonstration, or whether training in (c) communicating, (d) establishing goals, (e) coping with conflict, (f) using group procedures, (g) solving problems in groups, (h) making decisions, (i) collaborating or team-building, (j) building new organizational structures, (k) evaluating and monitoring, or (l) a combination of more than one of these.

D-4. Organizational level to be trained: whether (a) interpersonal, (b) subsystem, (c) more than one subsystem of the organization -- school or district -- or (d) the organization and its environment.

D-5. Pedagogy: amount and frequency of feedback to participants of indicators of progress and goal-achievement is almost the only way we vary our pedagogy of training. Obviously, we could vary the pedagogy in many ways; for example, act-then-think versus the contrary, flexible versus rigid curriculum, proportion of experiential learning, etc. However, the success of our training methods usually depends on using the pedagogy we have developed; we do not often try to vary it. We do not have any indicator of this variable of frequency of feedback within the Kent data.

D-6. Amount and frequency of time-overload required of participants. This can be considered part of the cost of change -- part of what is risked. See variable C-1 above.

D-7. Appropriateness of the pacing of phases of the training to match the movement of readiness on the part of the trainees. In the psychological literature, this is discussed as level of complexity, among other headings. See, for example, the studies by Dember and Earl (1957).

D-8. Total amount of training. This has four parts: (a) amount and (b) distribution of hours among the intervention team members and (c) amount and (d) distribution of hours among client persons and subsystems. See Chapter 6 for evidence on the effects of different amounts of training.

Effects on First-Level Skills: Individual and Interpersonal

These are the variables already listed in our discussion of first-level skills; namely,

E-1. Degree and distribution of skill in interpersonal communication.

E-2. Degree and distribution of skill in converting frustrations into problems.

E-3. Degree and distribution of skill in eliciting information.

E-4. Degree and distribution of skill in responsiveness.

E-5. Degree and distribution of skill in *bringing into view the personal abilities* and resources of others.

Effects on Second-Level Skills: Organizational Practices in Subsystems

Here we repeat the variables we listed in our discussion of second-level skills:

F-1. Degree and distribution of skill in *clarifying communication* throughout the subsystem.

F-2. Degree and distribution of skill in *agreeing upon goals* and revising them as necessary.

F-3. Degree and distribution of skill in *uncovering conflicts* and dealing with them as problems.

F-4. Degree and distribution of skill in *using improved procedures in meetings*.

F-5. Degree and distribution of skill in *group problem solving*.

F-6. Degree and distribution of skill in *making decisions* by appropriate methods.

F-7. Degree and distribution of skill in *assessing progress*.

In addition to these subsystem skills, it is often useful to assess the three qualities we collectively call charisma (after Berlew). These three qualities overlap in meaning with the variables just above.

F-8. Degree of *charisma* in the subsystem as *ability to conceive goals as furthering the values* cherished by the group.

F-9. Degree of *charisma* as *ability to make one another* *feel strong and personally effective.*

F-10. Degree of *charisma* as *ability to feel a sense of urgency* concerning the achievement of stated goals.

Effects on Third-Level Skills: Outcomes or End-Products

These variables or conditions or organizational abilities are those we take to characterize the self-renewing organization -- the organization capable of constructive adaptation. But the four criteria we listed in our discussion of third-level skills are not simple unidimensional variables. Hence, we shall list some simpler variables under each of the criteria. The reader should keep in mind, too, that it is even more difficult to conceive appropriate assessments at this third level of organizational functioning than at the other two. Constructive adaptation implies innovation, variety, and non-routine functioning. Consequently, it is very difficult to specify in advance just what an assessor ought to look for. The best suggestion we have is to count events that seem to evidence those qualities. Our suggestions for "variables" (if you want to call them that) below are the best we can do at this time. We hope that future research will provide us with better ways of interpreting organizational behavior in respect to constructive adaptation.

Instituting problem solving episodes. The criterion here is that in almost all types of subsystems in the school or district, systematic problem solving is instituted when progress toward a goal becomes unacceptable, and we list this below as variable G-1.

The criterion includes marshalling resources to meet problems. By resources, we mean the resources in and among people. People are the guardians and dispensers of technical resources (money, equipment, etc.). The variable here is that of responsiveness to problems. Doing something about a problem, of course, requires formulating the problem, making plans and carrying the plans into action. Instituting problem-solving is the earlier phase; taking action and monitoring results is the later phase. Consequently, some particular action on the part of a school could reflect both the criterion of *instituting* problem solving and the criterion (below) of taking action steps. Following are some specific examples of actions (or qualities of them) that could be taken as evidence of the ability of a school or district to meet this criterion.

G-1. Appropriateness of *applications of systematic group problem* solving when progress toward a goal becomes unacceptable.

G-2. Dispatch (relative quickness or delay) in *rejecting an innovation or committing effort to it*. If effort is committed, the criterion is met better if the effort is shared (that is, the amount and distribution of the effort is known to all concerned) and widespread in the school or district. Examples of relevant innovations are desegregation-integration, team teaching, programming, planning, budgeting and evaluation systems, and the like. See comparisons of the adoption of team teaching in Chapter 10, and the establishment of the cadre of organizational specialists in Chapters 2, 4, and 12.

G-3. Appropriateness with which *a system or subsystem calls upon outside experts for help*. An example of an event that can be counted is the work of the Kent cadre with the superintendent's cabinet described in Chapter 2.

G-4. Number of events or problem solving activities that evidence a *perception in system or subsystem that pain and conflict can be used as information* and are not taboo -- that conflict and pain can be dealt with actively, confrontively, and purposefully. We described an event of this sort in Chapter 2: the case of the school that called in the cadre when a large number of teachers had handed in their resignations. This event also, of course, reflects ability of the G-3 sort.

Maintaining access to fresh ideas and other personal resources. Here we mean maintaining access at the organizational level. Evidence would consist of any kind of undertaking that could bring out new potentialities for ideas of further action. The criterion is that in almost all types of subsystems, the organization draws not only upon the abilities of members that the cyclic repetitive routines require of them, but it also draws upon abilities they possess that would not be required in a traditional job description. Some of these non-routine abilities are sometimes applied in subsystems to which the individual does not routinely contribute. The happenings we have numbered G-3 and G-4 above could be indicators. Here are some further possibilities.

G-5. Degree of success in *changing the role-reciprocations between teacher and pupil* toward using a greater range of the potentialities of teacher and pupil. See Chapter 5 for an example.

G-6. Number of events that give evidence of *a perception in the school or district that the redistribution of power need not be* *a zero-sum game*. See Chapter 9.

G-7. Degree of the district's *support for organizational specialists*. See Chapters 4 and 11.

Taking action. This is responsiveness at the organizational level. The criterion is that in almost all types of subsystems, non-routine actions, planned after careful diagnosis to meet emerging internal or external demands, are carried through and assessed for effect. This is done not merely at the individual level, but at least at the level of the group; the group may be ad hoc, or it may be a regular segment of the organization that puts aside some of its routine operation for a time. Some groups, such as a cadre of organizational specialists, might have almost all their time assigned to non-routine tasks or to aiding others in non-routine, emerging tasks. Once in a while, a non-routine emerging task can involve the entire organization. Examples could be of the sort numbered G-1, G-2, G-3, and G-5 above.

Assessing movement. Here the criterion is that in almost all types of subsystems, progress toward goals is checked periodically (though this is not necessarily done by the subsystem itself) and the assessment becomes known to all persons functioning in that subsystem and to appropriate persons in interfacing subsystems as well. Goals or methods or both are altered when progress is judged unsatisfactory. Continued effort toward the same goal by the same methods does not continue beyond a few cycles of operation when the belief becomes widespread that progress is inadequate (in the case of organizational supports for teaching, a cycle is ordinarily a year in length).

As we saw in Chapter 2, the Kent district reacted with dispatch and courage to the financial crisis, and certainly monitored the degree and speed with which they got their balance-sheet back into the black. They also did not have to bring in outsiders to clean house. There are a few evidences, too, in the doings of the cadre. For example, there was much discussion in the cadre's minutes of assessing their progress toward their own goals (as distinct from helping schools monitor their progress). See Chapters 2, 4, and 12 for other doings of the cadre of organizational specialists.

In Chapter 11, we shall present the results of a few questionnaire items that have some connection with third-level skills, but these items are not very satisfactory. Our best evidence within the Kent data lies in specific spontaneous events that reflect the character of constructive adaptation. We shall point these out as we go along.

Appendix 4-A

Work of the Kent Cadre from 1969 to the Fall of 1974

Each section in this appendix summarizes interventions made with a particular client group. The entries in each section include the date, details of client group membership, the length of time involved, the nature or purpose of the intervention and the consultants or specialists involved. This list is probably incomplete, since the information comes largely from the Kent cadre's memo-records of meetings.

The Kent Schools

Elementary School K01

(a) 2/74; staff; 2 hours; diagnosis; Cadre.
(b) 4/74; staff; 3 hours; data feedback; Cadre.
(c) 8/74; staff; 12 hours; training; Cadre.

Elementary School K02

(a) 8/70; staff; 7 hours x 2 days; training; Cadre.
(b) 11/70; staff; meeting; feedback from interviews; Cadre.

Elementary School K04

12/73; staff 4 hours; diagnosis-data feedback; Cadre.

Elementary School K05

(a) 10/68; staff; meeting; planning; CASEA.
(b) 11/68; staff; meeting; interviews; CASEA.
(c) 1/69; staff; meeting; feedback; CASEA.
(d) 3/69; staff; 6 hours; training; CASEA.
(e) 8/70; staff; 6 hours; training; Cadre.

Elementary School K07

8/72; staff; unknown; unknown; Cadre.

Elementary School K08

10/73; administrators; 1 hour; diagnosis; Cadre

Elementary School K11

(a) 10/68; staff; 2 meetings; interviews; CASEA.
(b) 11/68; staff; 1 meeting; feedback; CASEA.
(c) 12/68; staff; 9 hours; training; CASEA.
(d) 2/69; staff; meeting; planning; CASEA.
(e) 3/69; staff; 6 hours; training; CASEA.
(f) 8/70; staff; 6 hours x 4 days; training; Cadre.
(g) 10/73; administrators; 1 hour; diagnosis; Cadre

Elementary School K12

(a) 8/69; staff; 10 hours in 2 days; training; CASEA and Cadre.
(b) 12/69; staff; 4 hours x 2 days; training; CASEA and Cadre.
(c) 8/70; staff; 7 hours x 2 days; training; Cadre.
(d) 1/72; staff; 7 hours x 2 days; training; Cadre.

Elementary School K13

(a) 3/70; staff; 2 hours x 5 days; training; Cadre.
(b) 8/70; staff; 5 hours; follow-up; Cadre.

Elementary School K14

(a) 8/70; staff; 3 hours x 7 days; training; Cadre.
(b) 11/70; staff; 3 hours x 2 days; follow-up; Cadre.

Elementary School K15

(a) 8/70; staff; 22 hours in 4 days; training; Cadre.
(b) 10/70; staff; meeting; process consultation; Cadre.
(c) 12/70; staff; meeting; discussion; Cadre.

Junior High School K22

(a) 9/69; principal & some teachers; 2 hours; diagnosis; Cadre & CASEA.
(b) 9/69; staff; 2 hours; training; Cadre & CASEA.
(c) 10/69; staff; 2 hours; training; Cadre & CASEA.

Junior High School K23

(a) 10/68; staff; meeting; group interviews; CASEA.
(b) 11/68; staff; meeting; feedback; CASEA.
(c) 1/69; staff; meeting; planning; CASEA.
(d) 2/69; cabinet subgroup; 2 meetings plus 4 hours; training; CASEA.
(e) 2/69; small groups; meeting; planning and training; CASEA.
(f) 2-3/69; department group; 3 meetings; training; CASEA.
(g) 3/69; staff; 7 hours; training; CASEA.
(h) 5/70; staff; 3 meetings; process consultation and training; Cadre.

High School K31

(a) 10-11/68; staff; 2 meetings; interviews and feedback; CASEA.
(b) Winter/69; department chairmen and administrators; 4 meetings; entry discussions; CASEA
(c) Spring/69; department chairmen; 3 meetings; training; CASEA.
(d) Spring/69; department chairmen and administrators; 2 meetings; planning; CASEA.
(e) Fall/69; department chairmen and administrators; 5 meetings; process consultation; CASEA and Cadre.
(f) 11/72; administrators; unknown hours; process consultation; Cadre.

High School K32

(a) 10-11/68; staff; 2 meetings; interviews and feedback; CASEA.
(b) 1/69; administrative group; 3 hours; process consultation; CASEA.
(c) 1/69; humanities department and coordinator; 5 hours; imaging; CASEA.
(d) 2/69; staff; 3 hours and 1 meeting; problem solving; CASEA.
(e) 3/69; administrators; 2 hours; planning; CASEA.
(f) 4/69; cabinet; 15 hours in 3 sessions; training; CASEA.

District-Wide Groups

Superintendent's Seminars

From December/71 through June/73 meetings approximately once a month for superintendent and groups of individual staff members from the district; Cadre convenes and facilitates; about 2 hours each; numbers in attendance unknown.

Social Studies Advisory Committee

11/72 and 3/73; 2 meetings of 50 persons facilitated by Cadre.

Foreign Language Committee

1/73; facilitation; Cadre.

Kent Education Association

(a) beginning in January/71; process observation at meetings of 50 member representative council; Cadre.
(b) Spring/71; problem solving sessions for representative council and executive board followed by confrontation meeting; Cadre.

School Board Meetings

Fall 1970; "some" meetings; unknown hours; process consultation; Cadre.

Principals

7/70; 1/2 day; training; Cadre.

Communication Survey

10/73; unknown hours; superintendent commissioned a survey of all school staffs to ascertain their desires about communicating with him. Completed by Cadre by January 74; Personnel Department helped compile data. Results fed back in writing to principals and cadre.

District Budget Election Committee

(a) 12/71; 1 meeting; Special Levy Seminar; facilitation; Cadre.
(b) Nov/72; unknown hours; problem-solving training; Cadre.

Central Office Groups

Superintendent's Cabinet

(a) January 1970 through September 1971; process observation; Cadre.
(b) July 1970; one week; training Cadre.

Curriculum Development Division

July 1970; one week; process consultation; Cadre

Superintendent's Summer Workshop

August 1973; 3 days; facilitation; Cadre

Parent, Student, or Out-of-District Groups

PTA Presidents and Building Principals

(a) May 1970; one meeting; facilitation, Cadre
(b) September 1973; one meeting; training; Cadre

Elementary School Staff and Parents

(a) May 1970; "some" meetings; conferences between staff and parents of K10 establishing drop-in center to deal with drug problems; facilitation; Cadre
(b) Spring 1974; staff & PTA members of school K04; one meeting; training; Cadre

PTA District Organization

(a) 1972-1973; 3 meetings; facilitation; Cadre
(b) April 1973; one meeting; problem identification session; facilitation; Cadre

Multi-Ethnic Camps

(a) September 1969; weekend camp designed to acquaint students with the complexities of interpersonal and group relations; 40 students in attendance; facilitation; Cadre.
(b) May 1970; weekend camp; 80 students in attendance; facilitation; Cadre.
(c) May 1971; weekend camp; 100 students in attendance; facilitation; Cadre.

An Eastern Washington District

6/70; specific client unknown; 2 days; training; Cadre.

Elementary Staff in Nearby District

8/70; 2 days; training; Cadre.

Seattle Area Principals

11/70; 55 elementary principals present; demonstration meeting; Cadre.

Tacoma Model Cities Council

5/71/ 1 day; training; Cadre.

League of Women Voters

1971; Leadership Conference; 2 days; training, Cadre.

Inservice Courses; Cadre

Phase I: Techniques of Communication

(a) 11/69; 12 hours; 30 trainees.
(b) 2/70; 12 hours; 30 trainees.
(c) 1/71; 12 hours; unknown number.

Phase II: Communications and Interpersonal Relations

(a) Spring/70; 30 hours; 45 trainees.
(b) Fall/70; 30 hours; 26 trainees.
(c) 2/71; 30 hours; unknown number of trainees.

Phase III: Course for Perspective Specialists

Spring/71; 30 hours; 29 trainees; taught by CWSC professor.

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Appendix 4-B

Comparison of the Financial Resources Required to Provide Organizational Consultation to a School District for One Year Using Three Different Methods

The table below compares the costs of providing assistance at the scale of the Kent cadre among three different methods: (1) the cadre method, (2) hiring outside consultants, and (3) hiring two full-time internal consultants. These costs do not include salaries for time spent in planning or the salaries of client groups since it is assumed that these would be comparable for all three strategies.

Internal Cadre

Coordinator's salary (1/2 time)	$ 7,000
Released time for specialists	5,000
Self-renewal events for cadre	6,000
Office operations and materials	350
Outside district consultants	750
Travel	300
Research and evaluation	600
total	$20,000

Outside Consultants

Salaries for consultants ($150 per day or $18.75 per hour)	$24,375
Instructors for inservice courses at $550 per course, the standard rate of the University of Oregon's Division of Continuing Education	3,300
District Coordinator (1/2 time)	7,000
total	$34,675

Two Full-Time Internal Consultants

Salaries	$30,000
Office operation and materials	700
Travel	300
Research and evaluation	600
total	$31,600

Appendix 4-C

Jobs Represented in the Eugene and Kent Cadres, 1969 and 1973.

Kent:

	June, 1969	January, 1973
district level administrators	4	2
coordinators or specialists	2	5
education association leaders	0	2
secondary administrators	1	3
elementary administrators	2	1
secondary counselors	4	5
secondary teachers	8	12
elementary teachers	3	8
totals	24	38
Number of schools represented	8	12

Note: The 1969 data were obtained from the list of persons who participated in the initial training event held by CASEA. The 1973 data do not reflect the activity level of individuals since they were obtained from the published mailing list of members. Fourteen of 24 or 58 percent of the original group were still active in January, 1973; 24 or 38 or 63 percent of the 1973 group were thus replacements trained by the Cadre itself.

Eugene:

	June, 1971	January, 1973
assistant superintendents	3	0
coordinators and specialists	6	6
secondary administrators	3	3
elementary administrators	2	2
secondary counselors	1	0
elementary counselors	2	2
secondary teachers	4	4
elementary teachers	6	8
totals	27	25
Number of schools represented	14	9

Note: The 1971 data were obtained from the list of persons who participated in the initial training event with CASEA. The 1973 data were obtained from a list of intervention team assignments and does not reflect accurately the extent of involvement of individuals. Twelve of 27 or 44 percent of the original group were still on teams two years later: 13 of 25 or 52 percent of those active or new members in 1973 were placements trained by the Eugene Cadre itself.

Appendix 4-D

Schedule of Training for the Kent Cadre

Monday 16 June 1969

9 a.m. Dick Schmuck makes introductory remarks. Dan Langmeyer sets off warm-up exercise: tag with two persons "it." PURPOSE: wake up, bring attention onto this group and upon the fact of interpersonal tendencies of approach and avoidance.

9:40 a.m. Discussion of hopes (personal goals) for these two weeks. PURPOSE: to acquaint one another with individual differences and commonalities. To practice paraphrasing.

Discussions take place in groups listed below:

Phil Runkel with:	(Names of trainees here)	Dick Schmuck with:	(Names of trainees)
Neil White with:	(Names here)	Ron Martell with:	(Names)

[NOTE: In a format similar to the above, names of subgroups of trainees were listed throughout the schedule. Hereafter, "(Names)" will stand for the above format.]

10 a.m. PASS OUT observation forms. Each person chooses any one of the forms and fills it out. Coffee while filling out forms. When each person has filled out a form, members within groups share their observations.

10:30 a.m. Steve Saturen sets off the 5-square exercise. PURPOSE: to generate dynamics of dependence, initiative, cooperation, etc., in non-verbal display; to show relative value of speech in influencing people versus non-verbal symbolizing. Find groups by using lists below:

(Names)

Debrief in these groups. Practice communicative skills:

Behavior description: what actions did you see?
Describing feelings: what feelings did you experience?
Perception check: what feelings do you believe you saw in others?-- and what do those others now say about your perceptions?

11:15 a.m. Write and share. Pass out observation forms to all. Every person gets only one form, though different persons get different forms. All (including trainer) fill them out. Share observations.

11:45 a.m. Dick Schmuck, after everyone re-assembles in one large group, conducts debriefing of the morning's activities. What did we learn ...

about opening a laboratory?
about using groups?
about communicative skills?
What took more time or less time than you expected?
What else surprised you?

12 noon DURING LUNCH, two groups plan for later exercises: Phil Runkel, Steve Saturen, and four trainees prepare for the exercise on "Group Agreements" at 1 p.m. Ron Martell, Neil White, and four trainees prepare for the exercise with the Hollow Square at 2:35 p.m.

1 p.m. Go into two groups as below.

(Names)

Within groups, pass out sheets bearing three possible "group agreements." See whether trainees as a group of 23 can commit themselves to one or more of those agreements. (Further agreements within consulting teams will be sought at 10:20 a.m., Monday 23rd.) PURPOSE: To reach functioning commitments and to illustrate some difficulties in reaching agreements that are fully explicit.

1:30 p.m. Re-assemble as one group and debrief; compare agreements reached and difficulties. Reach agreements for total group of 23.

2 p.m. MEANWHILE, Neil White goes off with two trainees and Ron Martell goes off with two trainees to prepare for the Hollow Square exercise at 2:35.

2:10 p.m. People go into three groups to share observations:

(Names)

2:25 p.m. Coffee break.

2:35 p.m. Hollow Square exercise. PURPOSE: to show difficulties of one-way communication in hierarchical organizations. To generate perceptions and feelings concerning roles that send information and that receive it. Use following groupings:

(Names)

3:40 p.m. Debrief in each of the two groups. Use beach ball to control speaking.

MEANWHILE, Dick Schmuck goes off with six trainees to prepare for imaging to take place Tuesday a.m.

4:30 p.m. After people re-assemble into one group, Dan Langmeyer passes out questionnaire on decision-making grid and asks trainees to fill it out before morning.

4:35 p.m. Go home.

Tuesday 17 June

8 a.m. Dick Schmuck sets off imaging. PURPOSE: To demonstrate how to use confrontation to produce a readiness for more open communication even though some hostility exists between the confronting groups. Also, to practice role-playing and to learn more about the inter-group perceptions in the district. Participants divide into six groups, each group to act as if it were composed of elementary teachers, etc., as follows:

(Names)

Each group is to write behavioral descriptions of two other groups, as follows:

ElemTea describes SecTea and Cabinet.
SecTea describe Prins and StuPers.
Prins describe Cabinet and Curric.
Cabinet describe StuPers and ElemTea.
StuPers describe Curric and SecTea.
Curric describe ElemTea and Prins.

On one sheet of newsprint, write at least three things another group does that you find helpful. On another sheet, write at least three things that group does that you find not helpful. In brief, make two sheets for each of the other two groups, each sheet containing at least three items.

Each group next prepares two sheets about itself: one listing at least three helpful behaviors that characterize the group and the other listing at least three things the group does that probably seem unhelpful to others. Be sure to label all sheets fully: "Elem descrip of Sec," "Prins descrip of selves," etc.

8:50 a.m. Post all sheets on walls.

9 a.m. Sharing images. A trainee arranges fishbowl with ElemTea and their trainers inside, others outside. No empty chairs inside. A participant outside reads a statement his group has made about the inner group. A member of the inners paraphrases to the satisfaction of the outers. No defensive remarks or retorts are permitted; the member of the inner circle may only paraphrase. Then another outer reads another statement and another inner person paraphrases. Etc. This continues until two statements (only two, because of time limitation) from every sheet written about the inner group have been read and paraphrased.

Next, a member of the inner group reads a statement his group wrote about itself and this is paraphrased by an outsider. Etc. But not all groups will do this; see below.

Begin with SecTea and Cabinet (among the outsiders) reading statements about ElemTea (the inners).

Then, ElemTea read two statements from each sheet about selves.

Next, Prins and StuPers read statements about SecTea.

(SecTea do not read statements about self; leave these sheets posted.)

(Individuals may sneak out for coffee as convenient between now and 10:15.)

9:30 a.m. Cabinet and Curric read statements about Prins.

(Omit if time presses) Prins read statements about selves.

StuPers and ElemTea read statements about Cabinet. (Cabinet do not read statements about selves.)

Curric and SecTea read statements about StuPers.

(Omit if time presses) StuPers read statements about selves.

ElemTea and Prins read statements about Curric. (Curric do not read statements about selves.)

10:15 a.m. Dick S instructs groups about finding behavioral evidence. Each group takes the sheets of newsprint bearing statements written about it by others and, for each statement, thinks of behaviors its members have exhibited that could be taken as evidence by the other group to support its statement. Write this evidence on newsprint, labelling it fully.

10:50 a.m. Fishbowl with Cabinet and its trainers inside. Two empty chairs. When an outsider wishes to make a comment or ask a question, he sits in an empty chair. Permission to speak is bought by paraphrasing the last thing said by an insider.

An insider reads a statement written by an outsider and describes the behavioral "evidence" the insiders have found to support the statement. An outer person paraphrases. Then another insider reads another statement, etc. Only two statements are read from each sheet of newsprint.

Then Curric inside, etc.; then SecTea inside, etc.

(Because of limited time, ElemTea, Prins, and StuPers do not take the inner circle and display evidence.)

11:35 a.m. Debriefing in total group. Distribute observation sheets.

12 noon Lunch. Fill out observation sheets during lunch.

1 p.m. Dick S reconvenes participants in one group. Share observations.

1:30 p.m. Neil W sets off hand-mirroring. PURPOSE: group building. To explore interpersonal relations non-verbally; to illustrate how simple gestures can convey messages.

MEANWHILE, Dan Langmeyer goes off with three trainees to prepare for the NASA exercise.

For hand-mirroring, go into these groups:

(Names)

After hand-mirroring, debrief within groups:

What kinds of communication took place?
How did people differ?
How did you differ with different persons?
What surprised you?

2:10 p.m. Fill out observation sheets. Then re-assemble with total group for sharing observations.

2:40 p.m. Coffee break.

3 p.m. Dan Langmeyer and three trainees set off the NASA exercise. PURPOSE: To demonstrate the efficacy of problem-solving by groups compared to individuals, and to demonstrate a way of demonstrating the comparison. To generate behavior relevant to problem-solving in groups.

Go into groups:

(Names)

3:45 p.m. End discussion. Compute scores. Put summaries on newsprint.

Dan Langmeyer calls attention to comparative outcomes in the three groups. Then, in their separate groups, trainee-leaders conduct debriefing after explaining the use of the time-tokens. They emphasize behavior description and describing feelings.

4:30 p.m. Obtain observation sheets. Please fill these out at home and bring them with you tomorrow morning. Go home.

Wednesday 18 June

8 a.m. Using same groups as Tuesday at 3 p.m., share observations within groups.

MEANWHILE, Phil Runkel goes off with three trainees to prepare for the one-way-two-way communication exercise.

A trainee-leader, after everyone re-assembles, leads debriefing of time-tokens, tap-out, and beach ball as methods of controlling participation.

9 a.m. Three trainees set off the exercise on one-way and two-way communication. Pass out sheets with rectangles. Fifteen minutes is enough for each display. PURPOSE: to demonstrate advantages and disadvantages of one-way and two-way communication. Use the following three groups:

(Names)

MEANWHILE, Dan Langmeyer goes off with four trainees to prepare for the exercise with decision-making grid.

10 a.m. Re-assemble; share observations.

10:20 a.m. Coffee break.

10:40 a.m. Dan Langmeyer leads off exercise on the decision-making grid with lecturette on meaning of profiles made up from participants' answers to questionnaire. The four trainee-leaders head four groups. Groups talk about verification of individuals' profiles: are people the way the profiles say they are? PURPOSE: stimulate discussion of decision-making styles of individuals under different conditions, stimulate giving feedback, checking out information gathered from different sources. (How do you check out information?) Use the following four groups:

(Names)

Was discussion stimulated by having the feedback? Share observations within groups.

12 noon Lunch.

1 p.m. Dick Schmuck gives lecturette on Johari window. PURPOSE: stimulate constructive openness and reduction of hidden and blind areas. Then go into feedback exercise. Each group will focus on one member and describe, first, unhelpful and, then, helpful behaviors of the person being focused on. The focused-on person will then summarize what he has heard. The group will then go on to the next person. PURPOSE: Same as lecturette on Johari window. Further, to give practice in giving and receiving feedback, and to develop trust in the group. Use the following groups:

(Names)

3:05 p.m. Coffee break.

3:20 p.m. Re-assort into following groups:

(Names)

Give feedback on helpful and unhelpful behavior as in the previous groups.

4:20 p.m. Re-assemble in total group. How open are we in this group? Go on as long as people express feelings.

4:45 p.m. or later: Go home. Study the section of the Readings-Book on problem-solving, especially the Problem-Solving Sequence, Type II.

Thursday 19 June

GOALS FOR THE DAY: (1) knowledge about Problem-Solving Sequence Type II, (2) knowledge about ways of designing interventions, (3) skills in carrying out interventions, and (4) skills in evaluating competence of own group.

9 a.m. Neil White gives lecturette on purposes of the two days: (1) to provide practice in problem-solving with actual problems, (2) to provide practice in designing interventions as preparation for the intervention-simulations next week, (3) to focus on the group's needs as a team midway in the laboratory, and (4) to emphasize the need for evaluating the effectiveness of the team in planning and carrying out interventions.

Trainees will work in these four groups or modules throughout these two days:

(Names)

9:15 a.m. Ron Martell gives lecturette on Problem-Solving Sequence, Type II. PURPOSE: to review this technique and to restate the goals of the laboratory. Need now to develop norms and skills to weld teams. Your designs should use activities that will improve team skills rather than individual competencies. Choose interventions to foster group-competence.

9:30 a.m. Ron Martell announces beginning of problem-solving sequence. To work through the first three steps,

Groups I and II go off together with Steve S and Phil R.
Groups III and IV go off together with Dick S and Ron M.

These two doubled groups work through the following three steps:

Step 1. Review goals of the laboratory. What is the ideal state we seek? (Behaviors, values, knowledge, etc.)

Step 2. Review progress of the laboratory so far.

Step 3. What are our needs now as a team? What needs and improvements should have high priority? List high-priority needs on newsprint for sharing at 10:15;stick newsprint to wall.

10:15 a.m. Ror Martell reconvenes total group and leads sharing. Total group selects four areas of group-building as highest in urgency. Each modular group selects one of these for which it will design and carry out an intervention with the rest of the total group.

Break into the four modular groups to plan interventions. Roles are as follows:

	Trainer	Observer
Group I:	Steve S	Neil W
Group II:	Phil R	Jack N
Group III:	Dick S	Bill S
Group IV:	Ron M	Mary Ann S

In planning interventions,continue with the Problem-Solving Sequence:

Step 4: Brainstorm intervention techniques.

Step 5: Establish a tentative design for accomplishing the goal.

12 noon Lunch.

1 p.m. Continue in the four groups to finish designs. Write them on newsprint and post. Each group selects a representative to present the design to the total group.

1:20 p.m. Re-assemble and mill, looking at proposed designs.

1:30 p.m. General assembly. Each design is briefly presented and listeners offer constructive criticisms.

The four groups again separate. Each uses the information from the previous hour to review its design and make it final. The sequence then moves into:

Step 6: Commitment to action.

3 p.m. Intervention by Group I, led and conducted according to their design.

4 p.m.	Debriefing from the intervention of Group I, conducted as they specify.
4:30 p.m.	Dinner.
7 p.m.	Intervention by Group II.
8 p.m.	Debrief from Group II's intervention.
8:30 p.m.	Groups I and II evaluate their interventions; write and share Groups III and IV make alterations in their plans if they feel it necessary.
9 p.m.	Go home.
	Friday 20 June
9 a.m.	Intervention by Group III.
10:30 a.m.	Debrief from Group III's intervention.
11 a.m.	Intervention by Group IV.
12 noon	Lunch.
1 p.m.	Debrief from Group IV's intervention.
1:30 p.m.	The four groups meet separately and debrief from the last day-and-a-half. In filling out the observation sheets, answer these questions also: How did the group function as a working unit? How could its functioning as a team be improved? Were skills used helpfully?
2:30 p.m.	Form into the new groups listed below. PURPOSE: Sum up week's work. Unfinished business, gripes, interpersonal concerns, compliments, criticisms, plaudits, etc. Can the weak spots in the week's design be picked out? What needs more work or was missed entirely? Choose two representatives for the 3 p.m. fishbowl. (Names)
3 p.m.	Fishbowl for each group to report to total. Two empty chairs.
4 p.m.	Dick Schmuck introduces next week.
4:15 p.m.	Go home. No home-work except bring with you on Monday the diagnosis you have made of your own unit (assigned May 21). Happy week-end.

Monday 23 June

9 a.m. Inventory of strengths. PURPOSE: to make inventory of resources individuals can bring to teams, thus preparing to form actual subteams of cadre later.

9:45 a.m. Dick S opens discussion of criteria for forming teams. Trainers available for six teams this week are these:

1. Dan Lg
2. Ron M
3. Phil R
4. Steve S
5. Dick S
6. Mary Ann S and Neil W

10 a.m. Form into six tentative teams ad lib.

10:20 a.m. Group Agreements. Each team works through group agreements to establish some beginning norms for that particular team. Emphasize confidentiality and taking surveys. PURPOSE: to establish norms for team to function as a team.

11 a.m. In each team, members bring forth the diagnosis they made of their own units before the workshop (assigned May 21). Members share their information, being alert for possible places in the district that problems exist with which cadre might help.

12 noon Lunch. CASEA trainers discuss critical variables.

1 p.m. Participants re-assemble. Dick S gives lecturette on some critical variables that often deter effective functioning of schools and districts. Examples: (1) clogged information channels, (2) distrust, (3) unclarity about roles, (4) lack of influence from lower echelons. PURPOSE: These criteria can help choose target groups for future interventions.

1:30 p.m. Coordinator sets off brainstorming to find suitable target groups into which interventions can be planned. Each team goes off on its own, brainstorms for target groups, and writes its ideas for target groups on newsprint. Each team chooses one person to represent it in the fishbowl at 2 p.m.

2 p.m. Fishbowl with eight chairs inside, two of them empty for visitors. Inner ring of representatives is charged with establishing priorities for target groups. In determining priorities, they might produce three lists: those target groups to be worked with immediately, those to be worked with later, and those not to be planned for at present. Inner members slip out every 10 or 15 minutes to confer briefly with own team, who should be clustered outside. In the end, a list of target groups should be produced with one or more assigned to each Consultant Team. PURPOSE: to produce assignments of target groups to teams and also to give practice in observing group process, both as participants and as observers.

4 p.m. Debrief and share. How might fishbowls be used with target groups or elsewhere in the district?

4:30 p.m. Assignment: Before tomorrow, find out where some members of your target group will be, available for interviewing, tomorrow (Tuesday) between 3 and 9 p.m.

4:35 p.m. Go home.

Tuesday 24 June

9 a.m. Dick S gives lecturette on stages of building a design for intervention; these are similar to the stages of problem-solving. PURPOSE: to input cognitive framework for use in designing interventions.

10 a.m. Teams separate and begin designing. Teams are asked to speculate on the problems in their target groups by preparing force-field analyses.

1 p.m. Lecturette or other form of input on techniques for interviewing, questionnairing, and observing, primarily the first.

2 p.m. Teams write interviews to be used this p.m. with members of target groups. (Practice in writing questionnaires and observation schedules will occur in the fall.) PURPOSE: to get ready to obtain diagnostic information.

3 p.m. Go out to do interviews.

Further assignment: before morning, skim or review the Training Manual (not the readings book).

Wednesday 25 June

9 a.m. Coordinator opens session with participants re-assembled. Teams share data from interviews. Check outcome of interviews against yesterday's theorizing about the relative importance of various restraining forces.

10 a.m. Dan Lg opens. Teams separate and brainstorm for action-alternatives for reducing restraining forces. Alternatives are to be in the form of activities or exercises. Some knowledge about what is in the training manual will be very useful at this stage, as well as will ready access to the experience of particpants who have had experience with this sort of thing. As well as using ideas from the book or from earlier experiences, however, consultants should feel free to invent new ideas.

Each team is to prepare two newsprint sheets. One will contain a numbered list of the restraining forces the team considers (by consensus!) the most important. The other will list training activities that could reduce the restraining forces, numbered correspondingly. Stick newsprint sheets to the wall.

11 a.m. Milling and looking. Each person adds ideas to the sheets ad lib, especially to the sheets bearing ideas for training.

12 noon Lunch.

1 p.m. Lecturette on time-line or action sequence. PURPOSE: to lay out schedule for action. Who does what, where, when, how?

Teams go off separately and summarize time-line on newsprint, putting hours of the day running from top to bottom and dates (even if only approximate) running from left to right, as in a schedule of classes except that the chart is not limited to one week.

3 p.m. Milling and helping by writing suggestions on the charts. Also coffee.

4 p.m. Return to teams to incorporate into the charts the help received during the last hour. The team taking the Community Advisory Group as a target group prepares for a rehearsal at 9 a.m. tomorrow (Thursday).

4:30 p.m. Go home.

Thursday 26 June

9 a.m. Coordinator opens. With everyone assembled, the team taking the Community Advisory Group as a target group rehearses, walks through, or tries out its design in a way of its own choosing with the entire assemblage. PURPOSE: to practice rehearsal or role-playing, to share information about what one team is doing, and to give this team a chance to polish its design by obtaining useful feedback.

10:30 a.m. The team designing for the Community Advisory Group reviews its experience during the rehearsal and modifies its design. Meanwhile, other teams go off in pairs and one team in a pair rehearses its design for the other team in the pair. There will be five teams doing this; CASEA trainers pair with the teams. Give feedback.

12 noon Lunch.

1 p.m. Rehearsals continue. Teams not yet rehearsed do so for feedback from teams that rehearsed 10:30 to noon.

2:30 p.m. The team with the Community Advisory Group presents its final design -- to be used this evening. All members of the workshop are to be assigned roles for the evening.

4:30 p.m. Recess and dinner.

7:30 p.m. Interaction with the Community Advisory Group.

10 p.m. or so: Go home.

Friday 27 June

9 a.m. Teams put final touches on their plans for interventions. The team with the Community Advisory Group debriefs from its experience last night.

10 a.m. Entire workshop re-assembles. We try to accomplish the following:

1. Consider ways of maintaining communication among the Communication Consultants, and especially among members of teams.
2. Form a Steering Committee.
3. Make concrete plans for follow-up work in the fall to provide for further practice and study. List resource-people to be used in the future, whether from within the district or without.

12 noon Goodbye unless there is unfinished business with the workshop as a whole or with particular subteams. (And there usually is!)

1 to 4 p.m.: as needed.

Appendix 4-3

Schedule of Training for the Eugene Cadre

This appendix includes a summary of what occurred during the three weeks of training in the summer of 1971. More information about the activities or concepts marked with asterisks (*) can be found in Schmuck, Runkel, Saturen, Martell, and Derr (1972).

June 14: Participants got acquainted and warmed up with the Who Am I Exercise,* then listened to introductions and discussed logistical concerns. They formed triads to discuss "What I hope the Cadre can do for me," then heard a lecturette on paraphrasing.* They formed new triads to discuss "What I hope the Cadre can do for Eugene" then listened to a lecturette outlining the strategies, clients, and issues with which organizational development is concerned. After hearing a lecturette on behavior description,* they formed cross-role groups to list their goals and concerns about the Cadre. Representatives of these small groups then sat at the center of a fishbowl* to summarize what their group had talked about. After lunch, they listened to a lecturette on describing one's own feelings* and formed small groups to build Tinkertoy* models of "What this district is like." After discussing their models, they debriefed the group processes, behaviors and feelings they had noted while working on the non-verbal task. The day was completed with a lecturette on checking one's impressions of the internal state of another.* Participants debriefed the total day and completed the Group Expectations Survey* Questionnaire.

June 15: Participants warmed up by sharing images they had of each other, making a nametag for a partner, and by doing calisthenics. They listened to and discussed the meaning of the data feedback from the Group Expectations Survey. They heard a lecturette on data-survey-feedback, then practiced the process by designing and administering a questionnaire, analyzing and feeding the data back to the total group. After lunch, they identified their own personal goals and resources on newsprint. They milled to read the lists of others then formed small groups to compare lists and identify resources already available to meet individual objectives. After the final debriefing of the day, participants were asked to read the chapter on goal setting in their handbooks.

June 16: Participants warmed up by pretending to explore a favorite place with a partner and doing the Hand Mirroring Exercise.* They heard a lecturette on constructive openness* and the interpersonal gap* then formed triads to review their personal goals in terms of what they had learned from their reading homework. After hearing a lecturette on the importance of uncovering conflict as a means to identify problems, participants formed groups according to the roles they had in the district to do the Imaging Exercise.* Stage 1 of the exercise in which participants generate images they have of other role groups was completed before lunch. After lunch, they completed Stage 2 in which the images are shared with other groups. After the final debriefing of the day, participants were instructed to read the chapter on improving meetings in their handbooks.*

June 17: The session began at 2:30 with a review of the phases of the Imaging Exercise. In Stage 3 the role groups again met separately to list examples of their own behavior that might have contributed to the images other groups had of them. In Stage 4 they shared these lists with the other groups. The exercise was completed by the formation of small cross-role groups in which they identified the underlying problems surfaced by the exercise. The total group then discussed the strengths and limitations of the exercise and identified settings in which it could be used. After dinner, they did an exercise called Planners and Operators* that surfaces the problems inherent in communication between groups that perform different functions. After the final debriefing of the day, participants were instructed to read the chapter on making decisions in their handbooks.*

June 18: During the warm-up participants assessed their individual progress in the workshop by moving a distance that represented how far they had come. After a lecturette on the distinction between task and process inquiry in groups, participants related these concepts to tne chapter on making decisions. Participants formed small groups to identify the skills they would need as Cadre members. They formed two groups to identify facilitating and restraining forces related to these skills. After lunch they heard a lecturette on the function of process consultants. One group then sat in the center of the fishbowl to come to consensus on the 10 most important facilitating forces. Those outside served as process observers. The groups switched and and the second group came to consensus on the 10 most important restraining forces. After final debriefing, they were assigned the chapters on organizational theory and training from their handbooks.*

June 21: After a lecturette on the training objectives for the second week, general considerations of the entry phase of interventions, and how entry works in practice, participants were presented with a hypothetical case study and formed small groups to discuss the questions they would ask to get additional information and the procedural steps they would recommend to the potential client. After a lecturette on general considerations about diagnosis and how diagnosis works in practice, participants were presented with another hypothetical case. This time they formed groups to list available and required data, plan techniques to collect needed data, and plan to tabulate and analyze the data. After lunch, they heard a lecturette on general considerations about planning and how planning works in practice.

With another hypothetical situation, they planned a sequence of training events and decided who would do what in the intervention. The day concluded with a final debriefing and the assignment of the chapter on designing training interventions.

June 22: After a lecturette on general considerations about training and the training done by the Kent Cadre, participants formed four teams and were assigned an activity frequently used in training events. Each group made plans to present the activity to the rest of the Cadre during the afternoon. After lunch, the groups took turns presenting the Five Square Puzzle*, chalk murals, the Blindfold Walk* and a Fishbowl* discussion of the strengths and limitations of the various exercises. The day concluded with final debriefing.

June 23: After a lecturette on general considerations about assessment and evaluation at the beginning, middle, and end* of interventions and general considerations about follow-up consultation, participants formed teams to plan the first day of follow-up training given data about prior work with the client group. After lunch they listened to a lecturette on the sequence of steps in organizational problem-solving.* They formed small groups to identify organizational problems in the Cadre, then met as a total group to identify the five that had top priority. They formed groups to analyze the problem of their choice by listing facilitating and restraining forces, and to brainstorm ways to overcome the most important restraining forces. The day ended with final debriefing in these groups.

June 24: The small groups completed the problem solving sequence by making action plans to implement the best proposals and forecasting consequences of intended actions. The rest of the day was spent with reports from the small groups, total group discussion, and selection of proposals and plans to implement.

June 25: Reports, discussion, and decision-making continued from the previous day. After lunch, the trainers presented a suggested reading list for the rest of the summer and the coordinator described client groups that had requested training later in the summer. Total group discussion and planning for the August workshop took up the afternoon which concluded with the Swizzle Stick exercise.

August 16: Participants reviewed agreements made in June about forming teams then applied these guidelines to form six teams. Each team discussed how their group composition would limit or enhance their ability to work, then spent ten minutes discussing each of the following topics: problem-solving, communication, intervention stages, organizational issues, procedures and exercises, and survey-data-feedback. The afternoon was spent planning for future work in the small teams. Group agreements were established and process debriefings concluded the day.

August 17: The morning was spent in the total group making group agreements about the role of the coordinator, how decisions would be made, the role of the steering committee, the composition of the steering committee, how to deal with ethical concerns, and how group agreements would be amended or changed in the future. The teams met to continue planning for future work during the afternoon.

August 18: Team meetings continued through the morning. During the afternoon one team presented a prototype demonstration package that included a slide show, a design, and possible handouts. Cadre members critiqued the presentation and planned improvements. Teams met to consider using the package in forthcoming work.

August 19: Team planning continued in the morning. After lunch, each team selected a representative to the steering committee. The total group discussed criteria for membership and made group agreements about the role of the steering committee. The latter discussed future self-renewal events for the Cadre and planned ways to keep records of the activities of teams. Other participants met to critique the handbook and brainstorm a list of topics for self-renewal sessions.

August 20: Teams completed their planning sessions in the morning. An afternoon meeting of the total group discussed proposals for self-renewal events generated by the steering committee. These were discussed, revised, and agreed upon. The inservice team shared their proposal for the inservice courses and described implementation plans.

Appendix 4-F

A Sample Handout to Advertise the Services of a Cadre of Organizational Specialists

The following mimeographed document was prepared by the Eugene Cadre to advertise its services. It was widely distributed in the district, usually to groups that had viewed the Cadre produced slide-tape presentation or had participated in demonstration events.

ORGANIZATIONAL
CADRE
SPECIALISTS

1. LIST OF CADRE SERVICES: To follow you will find a list of our services, plus an indication of the types of interaction we feel would be most productive and the processes we would like to follow if your staff or group decides to request CADRE assistance.

2. OUR BAG. Our specialty is helping you to assess your present structure, processes and procedures; identify discrepancies between the way things are and the way you want them to be; and initiate new ways of interacting to move closer to desired goals. Specifically, we might help with:

   a. improving communication between persons and between groups
   b. clarifying goals and assessing progress toward them
   c. sharing expectations about norms and roles, and forming agreements about what they should be
   d. dealing with conflicts that arise from miscommunication, unclear expectations, or other sources
   e. initiating procedures for improving meetings--setting agendas, assessing effectiveness, solving problems, convening groups, etc.
   f. clarifying influence patterns and decision-making procedures
   g. identifying and solving problems
   h. implementing innovations that require people to act in new ways
   i. providing a means for your staff to retrain itself, to accommodate new members, and to adapt to your changing needs in the future

3. OUR METHOD. Consultants are usually "hit and run" types: they come in, observe and ask questions, make recommendations and then disappear. In contrast, our type of OD training involves staff members in using your own resources to make and carry out recommendations to and for yourselves. This methos has several implications;

   a. It takes time. The "business" of a staff or unit meeting would be slowed up, by taking time to systematically look at your processes; or a time investment would be required to take a Saturday morning or after-school session for additional training.

   b. It takes commitment. We can't set goals or solve problems for you, but we can provide opportunities and activities that help you set goals or find solutions that staff members really want and will work for.

   c. It takes an "experimental attitude." It involves doing things you don't ordinarily do, which may seem awkward or artificial at first (like paraphrasing, for example). It may require that you suspend judgment of new behaviors for some time. Experience has shown the value of using these procedures to focus on specific problems and of creating situations in which the usefulness of specific processes can be demonstrated.

4. "CONTRACT BUILDING." We feel the need to do some collaborative groundwork before you and we are committed to a specific event. We would like to:
   - a. be assured that a consensual decision was reached to invite us
   - b. work with intact groups such as the total staff teaching units or ??? team, or other task groups
   - c. explore goals and probable activities with members of the group before the event
   - d. gather data through short interviews, questionnaires or observation to identify the issues to be dealt with

   So, we would see at least one meeting with the group (or part of it) prior to an actual intervention to discuss goals, procedures and problems; we would also like to get short written evaluations of our work.

5. OUR SERVICES. Let's say there are two basic reasons you might ask us to do some work with you. First, there may be a specific problem or issue to be dealt with, or people feel dissatisfied with some aspect of the way the staff is working together. Second, you may want to improve some aspect of your work, such as expanding the ungraded periods, sharing innovative ideas, improving meetings, dreaming about ways to make a school a really exciting place to teach and learn, etc. Generally, there are many kinds of things we can do.
   - a. Theory. We can convene discussion groups to talk about interpersonal relations, norms and roles, communication, etc.
   - b. Diagnosis. We can give you questionnaires or interviews to find out how people feel about specific issues or possible alternatives. These could simply be reported back to you, or training could be based on the results.
   - c. Exercises. We can conduct exercises or simulations to explore interpersonal interaction or other issues such as power, decision-making, communication and so on.
   - d. Procedures. We can teach (mainly by giving you experience in practicing) new ways of operating in staff or unit meetings or in other groups.
   - e. Process Consultation. We can attend unit or staff meetings to observe your interaction. The process consultant could either simply report his observations, or could actively step in at times to ask the group to look at how it is working and/or to suggest an activity or procedure to clarify what's happening or to improve group effectiveness.
   - f. Special Occasions. We could bring the total staff (or part of it) together for special things like sharing innovations or problems, to think about special projects you would like to get going, to use the problem-solving sequence for a given problem, and so on.
   - g. Other. We may have omitted something, or you may think of other ways we can be of assistance to you.

6. WHAT NEXT?

   We would be happy to talk with any or all of you about the things we've covered, or other ways we can help you, at unit meetings, staff meetings or otherwise. We're looking forward to the possibility of working with you during the school year.

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dr

Appendix 5-A

SCHEDULE OF CONSULTATION AND TRAINING IN SCHOOLS
BETWEEN SEPTEMBER 1968 AND APRIL 1972

Schedule of Consultation and Training in Schools between September 1968 and April 1972

Key:

(a) Notations of 1st, 2nd, 3rd indicate sub-events during month.

(b) Number of meetings held during regular school day; these were less than half a day in length, usually about an hour.

(c) Number of meetings of about half a day; includes meetings of 3 hours or more. These were usually held outside school hours.

(d) Number of all-day meetings.

(e) Total hours in event or sub-event.

(f) Portion of staff participating:

All	All or almost all of staff
Lead	Leadership group
Subg	Subgroup with subsystem character
Coll	Collection of persons without subsystem character
Unk	Unknown

(g) Nature of consultation:

Ent	Entry consultation or demonstration
Intw	Interviews for diagnosis or assessing progress
Trg	Training in communication or problem solving, or initial traini
Foll	Follow-up, such as monitoring problem solving
Proc	Process consultation
SurF	Survey feedback
Coa	Coaching or planning for later work.
Unk	Unknown

(h) Consultants:

CASEA	CASEA personnel only
Cadre	Kent cadre personnel only
C&C	Both CASEA and cadre personnel

Year	Month	School (a)	Mtgs in schl (b)	Half day mtgs (c)	Full day mtgs (d)	Hours (e)	Portion of School (f)	Nature of constn (g)	Con-sul-tants (h)
68	Sept	K32	1			1	Lead	Ent	CASEA
68	Oct	K05	1			1	All	Ent	CASEA
		K11	2			2	All	Intw	CASEA
		K23	1			1	All	Intw	CASEA
		K31	1			1	All	Intw	CASEA
		K32	1			1	All	Intw	CASEA
68	Nov	K05	1			1	All	Intw	CASEA
		K11	1			1	All	SurF	CASEA
		K23	1			1	All	SurF	CASEA
		K31	1			1	All	SurF	CASEA
		K32	1			1	All	SurF	CASEA
68	Dec	K11		3		9	All	Trg	CASEA
		K31	1			1	Coll	Ent	CASEA
69	Jan	K05	1			1	All	SurF	CASEA
		K23 (1st)	1			1	All	Coa	CASEA
		K23 (2nd)	1			1	Lead	Trg	CASEA
		K31	1			1	Coll	Ent	CASEA
		K32 (1st)	1			3	Lead	Proc	CASEA
		K32 (2nd)		1		5	Subg	Trg	CASEA
69	Feb	K11	1			1	All	Coa	CASEA
		K23 (1st)	1			1	Lead	Trg	CASEA
		K23 (2nd)		1		4	Coll	Trg	CASEA
		K23 (3rd)	3			3	Lead	Trg	CASEA
		K31	1			1	Lead	Ent	CASEA
		K32 (1st)	1			3	All	Trg	CASEA
		K32 (2nd)	1			2	All	Proc	CASEA

Year	Month	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
69	Mar	K05			1	6	All	Trg	CASEA
		K11			1	6	All	Trg	CASEA
		K23 (1st)	1			1	Subg	Trg	CASEA
		K23 (2nd)			1	7	All	Trg	CASEA
		K31 (1st)	1			1	Lead	Ent	CASEA
		K31 (2nd)	1			1	Lead	Trg	CASEA
		K32	2			2	Lead	Coa	CASEA
69	Apr	K31	2			2	Lead	Proc	CASEA
		K32 (1st)		1	1	12	Lead	Trg	CASEA
		K32 (2nd)	1			3	Lead	Foll	CASEA
------------- Second administration of questionnaires in May 1969 -------------									
69	May	K31 (1st)	1			1	Lead	Proc	CASEA
		K31 (2nd)	1			1	Lead	Coa	CASEA
69	Aug	K12		1	1	10	All	Trg	C&C
69	Sept	K22	1			1	All	Trg	C&C
		K31	2			2	Lead	Proc	C&C
69	Oct	K22	1			1	Unk	Unk	C&C
		K31	3			3	Lead	Proc	C&C
69	Dec	K12		2		8	All	Trg	C&C
70	Mar	K13	5			10	All	Trg	Cadre
------------ Third administration of questionnaires in April 1970 ------------									
70	May	K23	3			3	Unk	Trg	Cadre

Year	Month	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
70	Aug	K02			2	14	All	Trg	Cadre
		K05		2		6	All	Trg	Cadre
		K11			4	24	All	Trg	Cadre
		K12			2	14	All	Trg	Cadre
		K13			1	5	All	Foll	Cadre
		K14		7		21	All	Trg	Cadre
		K15		2	2	22	All	Trg	Cadre
		All			2	14	All	Trg	Cadre
70	Oct	K15	1			1	All	Proc	Cadre
70	Nov	K02	1			1	All	SurF	Cadre
		K14		2		6	All	Foll	Cadre
70	Dec	K15	1			1	All	Unk	Cadre
72	Jan	K12			2	14	All	Trg	Cadre

------------ Fourth administration of questionnaires in April 1972 -----------

Appendix 5-B

RETURN RATES FOR QUESTIONNAIRES

Questionnaire Returns from Kent in 1968

School	Returns from adminis-trators	Teachers-and-others*		
		Total	Returns	Percent
Elementary schools				
K01	1	26	22	85
K02	1	26	21	81
K03	1	17	13	76
K04	2	31	31	100
K05	1	26	22	85
K06	1	20	14	70
K07	1	24	24	100
K08	1	27	25	93
K09	1	25	22	88
K10	1	23	17	74
Junior high schools				
K21	2	34	28	82
K22	2	39	28	72
K23	2	35	29	83
Senior high schools				
K31	4	94	73	78

Questionnaire Returns from Kent in 1969

Elementary schools				
K01	2	39	17	44
K02	1	34	20	59
K03	1	30	13	43
K04	1	29	22	76
K05	1	29	13	45
K06	1	29	15	52
K07	1	31	18	58
K08	1	37	19	51
K09	1	34	16	47
K10	1	36	25	69
K11	1	28	15	54
K12	1	20	19	45

* Includes teachers, counselors, heads of instructional departments, teaching aides, teaching assistants, librarians, and nurses. Non-teaching personnel are rare in these data, the most frequent being the school librarian.

School	Returns from adminis- trators	Teachers-and-others Total	Returns	Percent
Junior high schools (Kent 1969)				
K21	2	43	27	63
K22	1	37	33	89
K23	2	41	26	63
Senior high schools				
K31	3	84	43	51
K32	3	47	37	79

Questionnaire Returns from Kent in 1970

Elementary schools				
K01	1	30	20	67
K02	1	37	28	76
K03	1	27	20	74
K04	1	32	26	81
K05	2	40	33	83
K06	1	28	20	71
K07	1	32	23	72
K08	1	38	23	61
K09	2	33	22	67
K10	1	38	25	66
K11	1	31	21	68
K12	1	34	23	68
K13	1	27	17	63
Junior high schools				
K21	2	41	36	88
K22	3	46	42	91
K23	2	46	39	85
Senior high schools				
K31	3	73	57	78
K32	3	84	58	69

Questionnaire Returns from Kent in 1972

Elementary Schools				
K01	1	21	21	100
K02	1	26	14	54
K03	0	25	16	64
K04	1	28	21	74
K05	1	34	21	62
K06	1	28	20	65
K07	0	24	19	79
K08	1	25	19	76
K09	1	26	17	65
K10	1	27	17	63
K11	1	31	25	81
K12	1	31	22	71

School	Returns from adminis- trators	Teachers-and-others		
		Total	Returns	Percent
Elementary schools (Kent 1972)				
K13	1	32	28	88
K14	1	30	20	67
K15	1	27	20	67
Junior high schools				
K21	0	41	6	15
K22	2	34	28	82
K23	2	45	38	84
Senior high schools				
K31	1	66	51	77
K32	4	63	50	79
K33	1	8	8	100

Questionnaire Returns from Auburn in 1968

Elementary schools				
A01	1	10	9	90
A02	1	21	18	86
A04	1	20	18	90
A05	1	7	7	100
A06	1	24	18	75
A07	1	19	11	58
A09	1	9	7	78
Junior high schools				
A21	2	49	30	61
A22	1	42	31	74
Senior high schools				
A31	2	75	55	73

Questionnaire Returns from Auburn in 1969

Elementary schools				
A01	1	12	9	75
A02	1	24	21	88
A03	1	22	13	59
A04	1	22	17	77
A05	1	8	6	75
A06	1	23	15	65
A07	1	22	20	91
A08	1	23	14	61
A09	1	10	7	70
Junior high schools				
A21	1	50	23	46
A22	2	44	28	64
Senior high schools				
A31	2	83	58	70

Questionnaire Returns from Auburn in 1970

Schools	Returns from adminis-trators	Teachers-and-others Total	Returns	Percent
Elementary schools				
A01	1	12	10	83
A02	1	22	16	73
A04	2	20	17	85
A06	1	22	19	86
A07	1	21	16	76
A08	1	21	18	86
A09	1	10	6	60
A10	1	24	19	79
Junior high schools				
A21	1	47	24	51
A22	2	42	22	52
Senior high schools				
A31	3	81	41	51

Questionnaire Returns from Auburn in 1972

Elementary schools				
A02	1	20	19	95
A04	1	19	17	89
A06	1	18	17	92
A07	1	22	22	100
A08	1	24	22	92
A10	1	18	17	92
A11	1	20	19	95
A12 *	1	15	14	93
Junior high schools				
A21	2	50	48	96
A22	1	44	41	93
Senior high schools				
A31	3	87	28	32

Questionnaire Returns from Federal Way in 1968

Elementary schools				
F01	1	20	20	100
F02	1	23	20	87
F04	1	16	16	100
F05	1	24	24	100
F07	1	17	17	100
F08	1	24	20	83
F10	1	20	19	95
F11	1	12	4	33
F13	1	22	21	95

* Algona Elementary (A01) and Pacific Elementary (A05) have combined by this year into one school.

School	Returns from adminis-trators	Teachers-and-others		
		Total	Returns	Percent
Junior high schools (Federal Way 1968)				
F21	2	49	34	69
F22	2	48	44	92
Senior high schools				
F31	0	82	34	42
Questionnaire Returns from Federal Way in 1969				
Elementary schools				
F01	1	26	17	65
F02	0	23	12	52
F04	1	20	10	50
F05	0	20	10	50
F07	1	23	13	57
F08	1	20	8	40
F10	1	25	18	72
F13	1	27	24	89
Junior high schools				
F21	2	46	11	24
F22	1	44	10	23
Senior high schools				
F31	1	57	10	18
F32	0	49	20	41
Questionnaire Returns from Federal Way in 1970				
Elementary schools				
F03	1	25	18	72
F04	1	22	10	45
F06	1	25	14	56
F11	1	25	14	56
F12	1	25	15	60
F14	1	23	15	65
F15	1	21	9	43
F16	1	24	11	46
Junior high schools				
F21	2	45	28	62
F23	2	47	27	57
Senior high schools				
F31	3	55	27	49
Questionnaire Returns from Federal Way in 1972				
Elementary schools				
F01	1	21	19	90
F02	1	24	19	79

School	Returns from administrators	Teachers-and-others Total	Teachers-and-others Returns	Teachers-and-others Percent
Elementary schools Federal Way 1972 cont'd.				
F03	1	26	20	77
F04	0	23	16	70
F05	1	24	19	79
F06	1	24	17	71
F07	1	23	19	83
F08	1	22	16	73
F10	1	23	17	74
F11	1	22	18	82
F12	1	28	20	64
F13	1	24	20	83
F14	1	23	19	83
F15	1	22	16	73
F16	1	26	15	58
F17	1	19	13	54
Junior high schools				
F21	1	44	40	91
F22	2	47	42	88
F23	2	50	44	88
Senior high schools				
F31	3	55	40	73
F32	2	74	55	74

Appendix 5-C

TRAINING OF ELEMENTARY SCHOOLS

The major sources of the information on the training are the training designs put on paper by CASEA and by the Kent cadre of organizational specialists, the reports on training events in CASEA's files, and the minutes of the Kent cadre's steering committee.

Training for School K02

The principal of this school first approached the Kent cadre in Spring 1970 when he discovered that more than a dozen teachers planned to resign or transfer; he had been in the school about two years, and the problem seemed to be one of blocked communication between him and the staff. One Kent specialist met three times with him and some staff members to pursue ways of improving communication, and she gave him feedback she felt he was not receiving from teachers.

The staff requested training for August 1970; two specialists, with another observing, carried out the design below. The event was reported to be a success, and several faculty members later took the specialists' communications courses.

During Fall 1970 four specialists interviewed nine faculty members and planned to give the staff feedback at a December 1970 staff meeting.

Training Design August 27-28, 1970

Thursday, August 27, 1970

8:30 Introduction, goals, overview, ground rules.

8:45 Warm-up (12-15 to a group, 2 trainers to a group).

9:00 Paraphrasing (In triads: What do you hope to gain from these two days of training?)

10:15 Behavior Description.

11:45 Lunch.

12:15 Description of feelings to perception check.

2:00 5-Square exercise.

2:45 Debrief in large group (fish bowl). Use post-meeting reaction sheet.

3:30 Go home. (except for team and principal)

Homework: read problem solving paper

4:30 Debrief with team and principal.

Friday, August 28, 1970

8:30 Introduction and break into four groups.

8:35 Consensus on what makes a good teacher.

9:55 Fishbowl to report on consensus, but not necessarily to complete.

10:40 Mini lecture on problem solving. Problem: Lack of openness in schools or lack of involvement with others in the school.

11:00 Break into four groups. Force Field Analysis -- Restraining and facilating forces.

12:00 Lunch.

12:30 Establish priorities on forces.

1:00 Brainstorm ways to eliminate one or two restraining forces.

2:00 (Hold this time firm) -- Post forces, mill and read.

2:30 Fishbowl -- Consensus on appropriate actions, if any.

3:30 Debrief.

Training for School K05

We and the district administration chose this school for training because it was reported to have both double-shifting and team teaching. Two of the school's four wings were remodelled in 1968-69 to remove interior walls and allow for team teaching arrangements.

The schedule on contacts with the school was:

October 29-30, 1968	Short meeting to explain project to faculty; interview principal; by one CASEA crew member.
November 15, 1968	Individual and group interviews of faculty by two CASEA crew.
January 7, 1969	Short meeting to feed back data and set goals for training; by one CASEA crew.
March 21, 1969	Six hours (one day) training by three CASEA crew with one CASEA observer.
August 25-26, 1970	Six hours (two mornings) training by two cadre.

October 29-30, 1968

We introduced the project to the faculty and asked them to complete a short questionnaire. We found that -- contrary to our expectations -- the school was neither extensively involved in team teaching nor planning to do so in the immediate future. The faculty seemed to accept the project.

November 15, 1968

Two of the CASEA crew interviewed nearly all staff members, asking about (a) ideal vs. actual state of school, (b) strengths and weaknesses of staff, (c) helpful staff members, (d) organizational problems, (e) problems between school and other parts of district.

January 7, 1969

When our crew arrived to feed back information from the interviews, we were surprised to find we were not expected; a faculty meeting was hastily called. Individuals ranked the organizational concerns we had drawn from the questionnaires and interviews. Then the staff met in three groups to try to reach consensus. A representative from each group then reported the group's rankings to the staff.

March 21, 1969

A report by the trainers to the rest of our crew described the main goal of training as establishing an effective team-teaching structure. This meant that we hoped to increase the internal effectiveness of teams as well as establish coordinative processes across teams and between the administration and the teams. Our immediate training goals for this first session called for practice in communication skills and for some team building before problem-solving.

The morning started with an explanation of our goals at the school, followed by an exercise on paraphrasing in trios. The practice seemed to go well, with the content of most discussions centering around problems of time.

We then divided the staff into groups of five for the non-verbal cooperation (five-square) puzzle, which the groups worked at with varied success.

The staff then formed two groups -- upper grades in one and lower grades in another -- to rank-order a list of ten educational goals in a fishbowl arrangement. During the debriefing nearly all the staff admitted that they had been avoiding overt conflict during the exercise, and we did not seem to have the attention of several people.

The afternoon was devoted to role-playing on issues that had been identified as school problems in questionnaires and interviews. One role situation hinged on the difficulty of bringing up problems (specifically, a grievance against another teacher) to the total faculty, while another focused on decision making and authority relations between the staff and the principal. The debriefing seemed to generate a fairly high degree of involvement.

To end the day, we introduced the concept of identifying a problem in terms of a "force field" of helping and restraining forces. The staff showed its highest level of enthusiasm we had seen that day during the analysis of the school's organization. At the end of this session, each grade-level group presented its list of forces to the rest of the staff.

The staff expressed mixed reactions to the day's work. CASEA did no further training with the school.

August 25-26, 1970

We have no information on the design of the training that took place on two successive mornings on August 25-26, 1970. The two Kent specialists who conducted the event reported that they thought the event too brief to produce the desired effects, though the principal told them he was well satisfied with the outcomes.

Training for School K11

School K11 was the first of the district's "open concept" schools; students and staff were double-shifting in the building of school K04 until March 1969. Contacts with the school were:

October 28, 1968	Short meeting to introduce project to faculty and interview principal; by three CASEA crew.
November 15, 1968	Group and individual interviews of faculty by two CASEA crew.
November 21, 1968	Short meeting to feed back data and set training goals; by two CASEA crew.
December 10-11, 1968	Nine hours (one day and one evening) training by four CASEA crew.
February 19, 1969	Short meeting to review progress and plan further training; by two CASEA crew.
March 21, 1969	Six hours (one day) training by four CASEA crew.
August 24-27, 1970	Twenty-four hours (four full days) training by two specialists.

October 28, 1968: Introduction

Three of our crew described CASEA's project to the staff and collected written suggestions for our intervention with the school. We discovered that team teaching was not yet in operation, but that part of the staff was moving in that direction.

November 15, 1968: Interviews

Two of our crew interviewed several teachers in grade-level groups, but were unable to talk with third and fourth grade teachers. We discovered that the staff had a lot of ambiguity and uncertainty about moving into team teaching, and many teachers had complaints about some others.

November 21, 1968: Feedback and Goal-Setting

One of our crew interviewed those teachers who had been missed on the previous visit, and then the staff met in small groups to rank concerns we had listed on the basis of prior interviews. Two representatives from each of the groups then met in a fishbowl to attempt to reach consensus. The faculty worked hard at the ranking task, though the principal did not participate and did not seem to welcome our presence in his school.

December 10-11, 1968

We conducted a two-day intervention on December 10-11, 1968, with three goals: (1) to bring a realization that problem solving requires staff members to communicate concerns to one another, (2) to have them experience success in sharing concerns, and (3) to give the staff the opportunity to make action plans. The design for the event was as follows:

Tuesday, December 10

8:45 a.m. We introduce the intervention and describe our role.

9:00 We divide the staff into three groups for the NASA exercise, and they work on the task until 10:00.

10:00 We tabulate results and conduct a debriefing.

10:30 The staff reassembles to debrief the exercise and look at learnings from it, especially ways in which interaction was similar to or different from the way the staff usually works. The discussion continues until lunch.

7:00 p.m. The intervention resumes that evening with an introduction of communication skills. Each grade level meets separately; each persons lists his own behaviors that are helpful to others, and ways to being more helpful to others. The group discusses the behaviors, using communication skills.

7:45 In the same groups, each person lists helpful behaviors of others, and groups share feedback with each individual.

9:00 Two representatives from each group meet in a fishbowl to share results of the small groups' work, and to look at how staff members could be more helpful to one another.

Wednesday, December 11

9:00 a.m. We describe three problems identified in yesterday's sessions. Staff members divide themselves into three groups according to individual interest to work on the problems. Work on the problem-solving sequence continues through the morning.

February 19, 1969

Two of our crew held a short meeting with the staff to review progress since the December intervention and to plan the proposed March event. In one group the emphasis was on reactions to the first event, while in the other the emphasis was on building an agenda for the next event. We agreed that the event would be used in part for evaluating efforts to move into team teaching and to make further plans. One of our crew described his reaction to the meeting:

> The groups worked surprisingly well. We noted that they did not hesitate to get down to work as they had done the first time. They not only worked on the problems that we gave them but seemed to do some work on their own in an open and direct manner. There are faculty members who seem much in agreement with CASEA about the function of honesty and reality and don't seem to shy away from their feelings, at least when CASEA is around (quite an asset).

March 21, 1969

We conducted a workshop that focused on communication skills and the problem solving sequence. Here is a condensed version of the trainers' report to our crew.

8:30 Introduce the day's design.

8:45 Conduct one-way/two-way communication exercise as a warm-up, with the staff in four groups.

9:15 Debrief the exercise.

10:00 Lecture on problem solving. The staff divided into six groups, roughly along grade levels. The faculty seemed to understand the sequence and appeared optimistic about using it. Problem solving continued until 3:00 p.m. with a one-hour lunch break.

3:00 One representative from each grade joined a fishbowl to debrief the day. Much of the discussion was simply reporting of the groups' works, with little discussion of processes.

3:35 A second fishbowl discussed future work with CASEA. Many faculty members were unable to identify our help concretely and were at a loss to specify how we could be helpful in the future. No definite plans were made.

August 24-27, 1970

Two specialists conducted a training event for the K11 staff in several sessions between August 24 and 27, 1970. We do not have records on whether the event departed from their design, which is presented below:

Monday, August 24

8:30 Warm-up: Picture exercise.

10 min. to get picture (5 to find, 5 to mill).

Then form into 3-man teams (but with persons not in your grade-level [working] team).

10 min. in 3-man teams, where each is teller, receiver, and observer (exercise was to pick a picture that best described oneself that morning).

5 min. to debrief in triads.

10 min. to debrief in large group.

9:05 Discussion of hopes and personal goals for these four days. Practice paraphrasing in the process: one offers input which is paraphrased by another, who then offers his input, etc. -- model procedures. 10 min. to divide into groups, for trainers to explain (review paraphrasing) and hand out review sheet on same. 5 min. to review handout. 40 min. for discussion in groups. 20 min. for debriefing in large group.

10:40 Exercise in behavior description -- meet in large group. 5 min. to brief four volunteers in roles to play, to brief four others on academic speeches (four skits), during which time trainer D briefs rest of group on what to observe.

5 min. for A and D to model behavior description.

50 min. to present skits, list behaviors observed, and correct lists as necessary.

20 min. to debrief the exercise and the morning.

1:30 10 min. for housekeeping chores: length of lunch, meeting times, etc.

1:40 Consensus task.

10 min. to introduce consensus (remind them of NASA, which they have done).

20 min. for each person to list the ten most important characteristics

of a team member.

30 min. teams arrive at consensus (3 persons).

30 min. consensus by groups of 6 (1st and 4th, 2nd and 5th, 3rd and 6th, divide principal and special education team among the 6).

List consensus on newsprint.

3:10 Coffee break: milling around posted consensus sheets.

3:30 Debriefing in large group: (A) The exercise. (B) The day.

Tuesday, August 25

8:30 Description of feelings. Follow with debriefing.

10:15 Five square, using description of feeling in debriefing.

12:00 Lunch.

1:30 Organizational problem solving dealing with real or potential problems they (teams and others) are facing at K11.

Introduce the first two of the five problem-solving stages to work on this time (statement of problem, force field analysis).

3:00 Introduce concept of feedback, and then debrief the afternoon, using feedback and other basic skills.

Wednesday, August 26

8:30 Introduce concept of group agreements: Focus on teams, e.g., how they will handle such things as personality conflicts, problems with principal, discipline, and confidentiality.

10:45 Perception checking and debriefing.

12:00 Lunch.

1:30 Review basic skills by tying together and showing inter-use.

1:45 Mini-lecture on Johari Window.

2:00 Go into Johari Window, first in triads, then in sextets. Follow with debriefing of the day, beginning with the Johari Window exercise.

Thursday, August 27

8:30 Finish organizational problem solving, taking them through steps 3 and 4 (and modifying No. 4).

Explain No. 5, but emphasize that it isn't goal of workshop to accomplish No. 5.

12:00 Lunch.

1:30 Strength building. Debriefing.

3:00 Debrief workshop. Trainers C and D request written and verbal feedback concerning their presence in workshop.

Training for School K12

School K12 had more hours of training, and more events, than any other school in the district. It was the second of the district's "open concept" schools, and was under construction until early 1970. Events for the school were:

August 20-21, 1969	Ten hours (one full day and one morning) training by a cadre team with a CASEA consultant.
December 3-4, 1969	Eight hours (two mornings) training by a cadre team.
August 24-25, 1970	Sixteen hours (two full days) training by a cadre team.
January 1972	Two days (fourteen hours) training by a cadre team.

August 20-21, 1969: Training

During the June 1969 training of the cadre, one team chose school

K12 as its target; team members interviewed the principal and began designing the intervention (using our problem-solving model as a guide to planning) during that laboratory. The team met again in late July to make final plans. The first training event was held at school K07, where the staff would be located that fall. Parts of the trainers' report of the event are included here:

> Participants: 29 teachers (includes 2K, 2 special ed., 3 from each grade level 1-6), media generalist, head custodian, head secretary, and the principal.
>
> Goals:
>
> 1. Having total staff develop, understand and agree to a philosophy of education for K12 that is compatible with with individual goals, and that includes consensual agreements about school policies on various matters.
> 2. Developing clear communication networks, openness, and trust within and across teams.
> 3. Facilitating constructive openness and helpfulness among staff members.
>
> The trainers identified a number of important benefits for the trainers, the participants, and the future of the cadre to come from the event.

December 3-4, 1969

The second training event for the school was on two successive mornings December 3-4, 1969.

December 3, 1969

8:00 a.m. We reviewed communication skills and divided the staff into triads for practice. After the exercise the groups talked about confusions in giving and receiving instructions (the trainers' instructions for the exercise had been unclear) and about students' confusion on hearing teachers' instructions.

10:10 One specialist introduced the imaging exercise quite skillfully. The staff was divided into several groups: experienced teachers, new teachers, support staff, classified employees. Our observer reported, "The groups did a good job of paraphrasing and it was in this exercise that I think they really began to see the importance of clarification." There was widespread and active participation in the debriefing.

December 4, 1969

8:15 After a warm-up exercise, staff members paired off and took turns leading each other in the blindfold "trust walk." Following the exercise the staff met in teaching teams and brainstormed list of behaviors that build trust and behaviors that destroy it. The trainers reported,

> The debriefing from this exercise was the most significant part of the intervention. The exercise had really built trust and some of the classified staff were beginning to confront the teachers with whom they worked. The staff didn't want to leave the large group for the next exercise.

10:30 After a lecture on the Johari Window, the staff again divided into teams to share observations of helpful behaviors. The

10:30 (cont'd) exercise was followed by debriefing, using the "beach ball" and "tap out" procedures to monitor participation.

August 24-25, 1970

We do not have a report on the actual sequence of events from the cadre trainers for the August 1970 event of the sort that we have for our own work in the school. Following is the tentative design for the laboratory sent to us by the cadre's coordinator:

Monday

8:30 - 8:45 a.m.	Introduction.
8:45 - 9:30	Warm-up, debriefing (one trainer to a group).
9:30 - 9:45	Review of skills in triads with anybody who is handy.
9:45 - 10:30	5-square in teams (prefer 4 groups).
10:45 - 12:15	Skill practice Exercise 10 on leadership and observing.
12:15 - 1:00	Lunch.
1:00 - 4:00 p.m.	Problem Solving -- arrange in groups by interest in various aspects of problem. "We need to build and maintain support for K12 program from those outside building." Problem-solving groups use post meeting reaction sheets to debrief.

Tuesday

8:30 - 9:00 a.m.	Get set for Dr. John.
9:00 - 11:30	Work with Dr. John.
11:30 - 12:00	Mill and read other aspects of problems.
12:00 - 1:00	Lunch.
1:00 - 2:30	Feedback exercise in triads with people most comfortable with -- suggest teammates.

2:45 - 3:15	Small groups on status of problem (and debrief workshop?).
3:15 - 3:45	Fishbowl: same.
3:45 - 4:00	Evaluate consultants.

January 1972

The staff received training again in late January 1972 from three specialists. The cadre's coordinator told us that the training was the "equivalent of two days" spread over some afternoons and evenings, and had the purposes of general refurbishing of processes and bringing the faculty closer together. We do not have a design for the event.

Training for School K13

The third of the district's "open concept" schools, K13 first opened in Fall 1969. The training events for the school were:

March 1970	Three specialists conducted a ten-hour workshop of five afternoon sessions of two hours each.
August 28, 1970	One specialist conducted a one day (five hour) workshop with another specialist as observer.

March 1970

The goals of the workshop, and a summary of the report of the event, are below:

> Introduction to the skills of paraphrasing, perception checking, behavior description and statement of feelings;
>
> Discovering group problem-solving difficulties through simulation activities;
>
> Learning to use a problem-solving sequence including the

force field analysis.

Briefly, two of the three groups seemed to achieve reasonable-to-very good success in meeting the objectives. One group had difficulty in the problem-solving sequence, perhaps because they were working on a problem that was poorly stated, or the team members were unable to perceive precisely how the group needed to be helped. The general reaction of the staff to the training session was good, and it was mentioned that the team that had difficulty wanted to invite the trainers back to go through a successful problem-solving sequence.

About a month later, the principal sent the following (undated) memo to the Communication Consultant Project Coordinator: "The K13 staff wishes to thank you and your team for conducting the communications workshop. It was a real learning experience for us and although some were not entirely successful, everyone felt that it was time well spent. Many concerns came to light. The experience has led to further communication. A great deal of fun was had by all. Everyone was thoroughly exhausted. It's something every staff should experience."

August 28, 1970

9:30-9:40 Introduction of goals.

9:40-9:55 Review of paraphrasing. Introduce paraphrase directions, trio practice.

9:55-10:10 Review of problem-solving sequence, groups select specific problem for analysis.

10:25-12:00	Group problem solving.
1:00-2:00	Complete problem solving.
2:00-2:30	Groups share problems, procedures for dealing with them.
2:30-3:00	Identifying staff resources in trios. One person asks another specific questions; observer writes responses.
3:00-3:30	Debriefing and evaluation.

Goals: (1) Review some skills.

(2) Experience a successful problem-solving sequence.

(3) Identify the staff resources that are available to you.

Training for School K14

Interventions

August 20, 21, 24-28, 1970	Twenty-seven hours training -- in several half-day sessions -- by two specialists with another as an observer.
November 1970	The two specialists taught the problem-solving sequence to the staff in two evening sessions (six hours).

August 20-28, 1970: Training

From our records: The training design was modified on 27-28 August from that shown below; the Kent trainers actually acted as observers while the staff worked out the details of opening this new school. Debriefing by Steering Committee on 7 October 1970 indicated the intervention was successful.

The trainers and observer returned to the school in November to conduct the problem-solving sequence postponed from the August lab. They reported that problems were solved, but skills were not used well (according to Steering Committee minutes for 9 December 1970).

Thursday, August 20

9:00 Goals and overview of laboratory.

9:15 The X's exercise.

9:30 Communications in small groups. (Handout and Lecturette)

9:45 Divide into 2 assigned groups -- names on board. One-way, two-way exercise.

10:15 Debrief in group.

10:45 Paraphrase skill and handout. Working in triads -- handout.

11:00 Triad assignments posted on board. Practice paraphrase -- observing in triads. Content: 3 advantages and 3 disadvantages Open Concept schools. Rotate roles at least three times.

11:30 Reassemble large group. Debrief and observations.

11:45 Preview of tomorrow.

Friday, August 21

9:00 Reaction to content of Thursday's handouts.

9:15 Perception check handout. Behavior description handout.

9:30 Divide into 3 teams: primary-intermediate-upper 5-square exercise; debrief.

10:25 Reassemble; debrief and observations.

10:45 Description -- expression of feelings; handouts. Exercises in triads.

11:45 Debrief and observation.

Monday, August 24

9:00 Summary of basic skills.

9:15 Feedback handout.

9:30 Team grouping. Pair with team member least known. Blindman exercise -- trustbuilding. 5 min. oral guidance only -- then switch roles. 5 min. touch guidance only -- then switch roles. 5 min. oral and touch guidance -- then switch roles.

10:15 Debrief and observations.

10:45 Brainstorming. Team Groups. Exercise in trust building using brainstorming.

11:30 Large group fishbowl.

11:45 Debrief and evaluation.

Tuesday, August 25

9:00 Team groups; consensus exercise -- NASA.

10:00 Fishbowl -- compare team rankings and reasoning.

10:15 NASA ranking and reasoning.

10:20 Debrief and observations.

10:45 Consensus Exercise -- What is a good teacher. Team groups to discuss responses and reach consensus.

11:30 Fishbowl -- report consensus and reasoning. Compare with principal's ranking.

11:45 Debrief and observations.

Wednesday, August 26

9:00 Team groups; consensus task: Major problems your group must deal with by end of 1st quarter (November 4). Rank order on newsprint.

10:15 Large group -- reporting from teams. Debrief and observations.

10:45 Introduce problem solving sequence -- force field analysis handout. Exercise: Use problem solving sequence with a problem identified previously.

11:45 Large group -- debrief and observations.

Thursday, August 27

9:00 Review of basic skills. Handout and large group discussion.

9:30 2 groups (6 members and observers). Group reasoning tasks: (1) ACES. Debrief. (2) Salesman. Debrief. Select new observers.

10:45 Continuation on problem solving sequence.

11:45 Large group -- debrief and observations.

Friday, August 28

9:00 Personal goals. Handout.

9:20 Continuation of problem solving (team or school).

10:45 Evaluation and assessment.

11:15 Summary and review.

The specialists later reported to the coordinator (in part):

> We had a session or two with the principal prior to the laboratory to get some input regarding the staff, but we did not have pre-assessment interviews with staff members.
>
> We found that scheduling the training program in the morning and keeping the afternoon free for building programs seemed to work out very well. We did suggest that the staff in their afternoon work try to use those skills which they had learned in the morning sessions.
>
> Another area which was not properly assessed in building the design for the laboratory was the fact that as we neared the school opening date, teachers would find more preoccupation with the necessary organizational

details which they needed to take care of prior to school opening. Therefore, we modified the printed design for the second Thursday and Friday to allow teachers to work on those details which they felt most pressing. We had planned to introduce the problem-solving sequence and have them work on that for those two days; however, since the staff had not been in operation before and had not teamed before, they could not really anticipate the kinds of interrelationships and problems which they would experience during the school year. Therefore they had difficulty in identifying a problem which would serve as a good vehicle for the problem-solving sequence. We agreed that there should be a follow-up after a period of a few weeks of school operation at which time they did wish to go through the problem-solving sequence.

On Friday morning we had a debrief session of the entire laboratory and had them fill out evaluations of each consultant. They indicated a need for having a consultant for each small group which consisted of the teaching teams. They also felt that we should emphasize the purpose for each of the exercises more fully although I did attempt to outline the purpose of each before we went into an exercise.

Training for School K15

The fifth of Kent's "open concept" schools, K15 began operating in Fall 1970. The major training event for the staff was 22 hours of training in several half-day sessions from August 21 to 26, 1970 by three Kent specialists with another as an observer. One specialist visited the staff in October to give process consultation during a staff meeting and in December to help the staff evaluate its interpersonal processes.

Here is the design for the August workshop:

General goal of consultants:

To teach the basic communication skills to the K15 staff.

To make the staff aware of why the skills of communication are important to use.

Behavioral objective:

To have each member of the K15 staff demonstrate basic communication skills to the comprehensive level.

Friday, August 21

Handout Clarifying by Paraphrasing for self-reference.

1:45 Individuals put list in order of importance.

2:00 Broke into two groups to form a consensus.

2:30 Listen to tape Working Together Effectively by Art Combs.

3:30 Returned to groups for a change of consensus, if any, after hearing tape.

4:00 Debrief.

Monday, August 24

Introduced goals of workshop and listed skills to be developed.

8:30 Clipped pictures from magazines which expressed how he felt at that time.

8:35 Formed groups of three to make perception checks and interpret pictures. Debrief on this activity.

9:00 Task: to state each person's philosophy of education.
Formed new triads, one minute allowed each person. Paraphrasing and perception checks were to be made.

9:05 Formed new triads. Each person to list or state three attributes he feels he has to contribute to the K15 school and staff.

9:15 Debrief in large group how they felt about the above tasks.

9:30 Task: Individually write out a realistic philosophy for K15 which can be lived with by all members of the staff.

10:15 Moved into three large groups to share each person's philosophy and to form a consensus.

11:00 Returned to one large group to form one consensus from the three groups.

11:30 Perception check: (A) What is a perception check? (B) How to do it? Consensus: (A) What is a consensus? (B) How much agreement is required to have a consensus?

12:00 Lunch.

12:30 Barriers to Learning: tape by A. Combs.

1:00 Large group reaction to tape as related to the philosophy developed for K15.

2:15 Fishbowl: One from each group discussed the philosophy developed for K15 by morning groups.

3:00 Philosophy consensus achieved.

Tuesday, August 25

8:00 Handouts Procedure for Workshop; Describing Feelings.

8:05 Perception check made of group of Monday afternoon activities with survey.

8:15 Discussion to clarify any questions on describing feelings.

8:25 Role play in three groups.

10:15 Large group presentation of role expectation of teachers, principal and specialists.

12:00 Lunch.

12:30 Individual reponse to the expectations others listed for him.

2:00 Handout Problem Organizational Sequence.

2:30 Problem of enrollment and team grouping presented by principal.

3:00 Worked on problem using steps or patterns listed in Problem Organizational Sequence handout.

Wednesday, August 26

8:00 Handout *Helping Relationships*.

8:15 Film: *The Eye of the Beholder*.

9:00 Group discussion of film.

10:15 Handout *Post Meeting Reaction Sheet Communication in Small Groups*.

10:30 Debrief. Set teaching teams.

Training for School All

School All in Auburn received training in problem solving and communication skills from two Kent specialists on 17-18 August 1970. The Auburn District provided funds.

The minutes of the Kent cadre's Steering Committee meeting of 6 May 1970 said that the emphasis of the Auburn training would be on skills development, including observer techniques. The Kent specialists reported very successful work with three of the four teams. The following is the design for the workshop:

Monday, 17 August

8:00 Introduction of consultants by principal.

Goals -- Learn and practice communication skills to make understanding one another easier. Develop a feeling of oneness as a team. Get a good start so the group can work well during the rest of the workshop. Practice some methods of working together to maximize chance to have 100% commitment of the staff.

8:30 Role play: warm-up and debrief. Two minutes each and switch partner. Choose the person in the room you know the least well. Teacher-parent conference. Principal-applicant interview (switch partners for this one). Debrief in large group.

9:00 Paraphrase and debrief -- Handouts. Trainers model. Work in triads. For content, how about concerns they have about open concept schools?

10:00 Behavior description and debrief. Arrange in different groups. Use role playing like Phase I course.

10:50 Describe feelings and perception check and debrief. Rearrange groups (like Phase I course?).

12:00 Lunch.

12:30 Rearrange groups. Put two groups on one-way, two-way, 5-square, or dot puzzle. Put other two groups on consensus task. Switch groups at 1:45.

2:00 Debrief consensus in fishbowl. Debrief day.

Tuesday, 18 August

Today in their own teams (get principal to help arrange).

8:00 Imaging, take a break some place.

11:00 Lecturette on problem solving. Teams choose their own problem.

12:00 Lunch.

1:00 Start problem solving sequence and debrief.

Evaluate with negative and positive statements, stated behaviorally. (1) Design of the workshop. (2) Trainers. (3) Was it worthwhile? (4) Did the participants bring to the workshop what you felt they should?

Appendix 5-D

CALCULATION OF SCORES FOR TESTS A THROUGH F

In each test, (1) choices offered by the questionnaire items were assigned weights, (2) means within each school were calculated for each item, (3) means were summed to give a _raw score_ for each school, (4) the raw score for each school was converted into a _standard score_. The calculation of the standard score used the mean and standard deviation taken over the elementary schools in a given district in a given year.

Test A

The stems of items will not be repeated here; they can be found in Chapter 5. The choices offered by the four items constituting the test (numbered 1, 2, 5, and 6) were weighted as follows.

Items 1 and 5:

Weight	Response
3	Yes, I think most would.
2	Maybe about half would.
1	No; most would _not_.

Item 2:

5	I would approve strongly.
4	I would approve mildly or some.
3	I wouldn't care one way or the other.
2	I would disapprove mildly or some.
1	I would disapprove strongly.

Item 6 used weights the reverse of those in item 2.

Test B

Item 4 used the same weights as item 5 of Test A.

Item 7:

An individual's score on this item was the number of persons named in response to the item; the number could range from zero through six. Acceptable answers included all proper names and all titles known to us as identifying actual jobs in the school or district. We excluded only persons not clearly job-connected or persons very vaguely identified. Examples of responses excluded are: "my wife," "Parents," "citizens," "some kids," "any of them," The school's raw score on this item was the mean over teachers-and-others.

Item 8 used the same questionnaire item as item 7, but the school's raw score was the number of persons the principal named.

Test C

Item 9 used the same weights as item 2 of Test A.

Items 10 and 11 used the same weights as item 5 of Test A.

Test D

Item 3 used weights the reverse of those in item 2 of Test A.

Item 12 used the same weights as item 2 of Test A.

Test E

Item 13 used weights the reverse of those in item 1 of Test A.

Test F

Items 14, 15, and 16 used the same weights as item 1 of Test A.

Item 17 used the same weights as item 2 of Test A.

Appendix 5-E

Means of trained and untrained elementary schools in Kent and of the elementary schools pooled in the Auburn and Federal Way districts on the questionnaire items comprising tests A through F

Means of Responses of Teachers-and-others in Elementary Schools to Item 1

Kent elementary schools

1968

Untr schs	Mean score
K03	2.40
K06, 01	2.64
K07	2.69
K10	2.71
Mean	2.73
K05	2.75
K08	2.78
K02	2.80
K04	2.86
K09	2.87

1969

Untr schs	Mean score	Trnd schs
K12	2.14	
	2.47	K11
K09	2.50	Mean
	2.56	K05
K07	2.60	
K08, 03	2.64	
Mean	2.66	
K02	2.69	
K10	2.76	
K01	2.78	
K04	2.80	
K06	2.82	

1970

Untr schs	Mean score	Trnd schs
	1.89	K12
	2.07	K13
	2.22	K11
	2.24	Mean
K09	2.26	
K06	2.32	
K03	2.36	
K01	2.40	
Mean	2.49	
K08	2.50	
K02	2.57	
K04	2.61	
	2.62	K05
K10, 07	2.65	

1972

Untr schs	Mean score	Trnd schs
	2.00	K02, 12
K04	2.22	
	2.29	K11
	2.30	Mean
	2.32	K13
K08	2.33	
	2.39	K05
	2.41	K15
K01	2.42	
K03	2.43	
Mean	2.47	
K09	2.50	
K07	2.53	
K06	2.58	
	2.63	K14
K10	2.80	

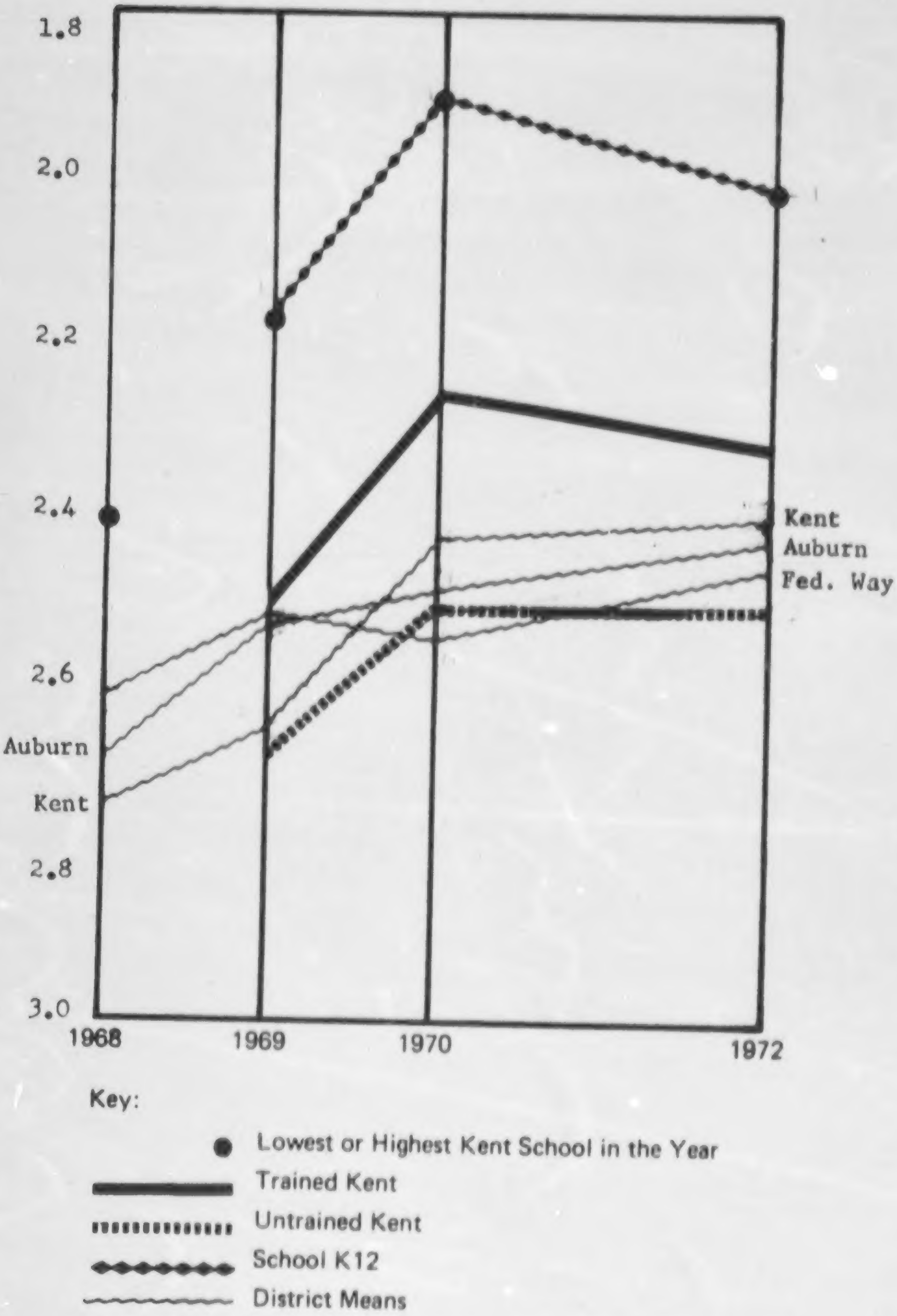
Districts

Kent	2.73	2.64	2.41	2.38
Auburn	2.69	2.52	2.47	2.43
Fed Wy	2.62	2.49	2.51	2.44

Item: Suppose Teacher X feels hurt and "put down" by something another teacher has said to him. In Teacher X's place, would most of the teachers you know in your school be likely to tell the other teacher that they felt hurt and put down?

( ) Yes, I think most would. [1 Favorable]
( ) Maybe about half would. [2]
( ) No; most would not. [3 Unfavorable]
( ) I don't know. [4 Not Tallied]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 1



Means of Responses of Teachers-and-others in Elementary Schools to Item 2

Kent elementary schools

1968	
Untr schs	Mean score
K05	2.86
K08	3.08
K09	3.15
K01	3.18
K10	3.25
K07	3.32
Mean	3.36
K06	3.50
K01	3.53
K02	3.70
K04	3.81

1969		
Untr schs	Mean score	Trnd schs
K07	2.94	
K12	3.00	
K03	3.08	
K10	3.13	
K09	3.20	K11
K08	3.26	
K04	3.29	
Mean	3.31	
	3.44	Mean
K06	3.60	
K02	3.65	
K01	3.75	K05

1970		
Untr schs	Mean score	Trnd schs
	2.57	K12
	2.67	K11
K02	2.77	
K01	2.85	
	2.86	Mean
K07, 09	2.91	
K03	3.00	
	3.03	K05
K04	3.04	
Mean	3.05	
	3.19	K13
K06	3.20	
K08	3.32	
K10	3.44	

1972		
Untr schs	Mean score	Trnd schs
	2.35	K14
	2.46	K02
K07	2.50	
	2.56	K15
	2.72	K11
	2.73	Mean
K06	2.79	
K01	2.80	
K10	2.81	
	2.82	K12
K09	2.88	
	3.00	K05, 13
Mean	3.01	
K08	3.32	
K03	3.33	
K04	3.62	

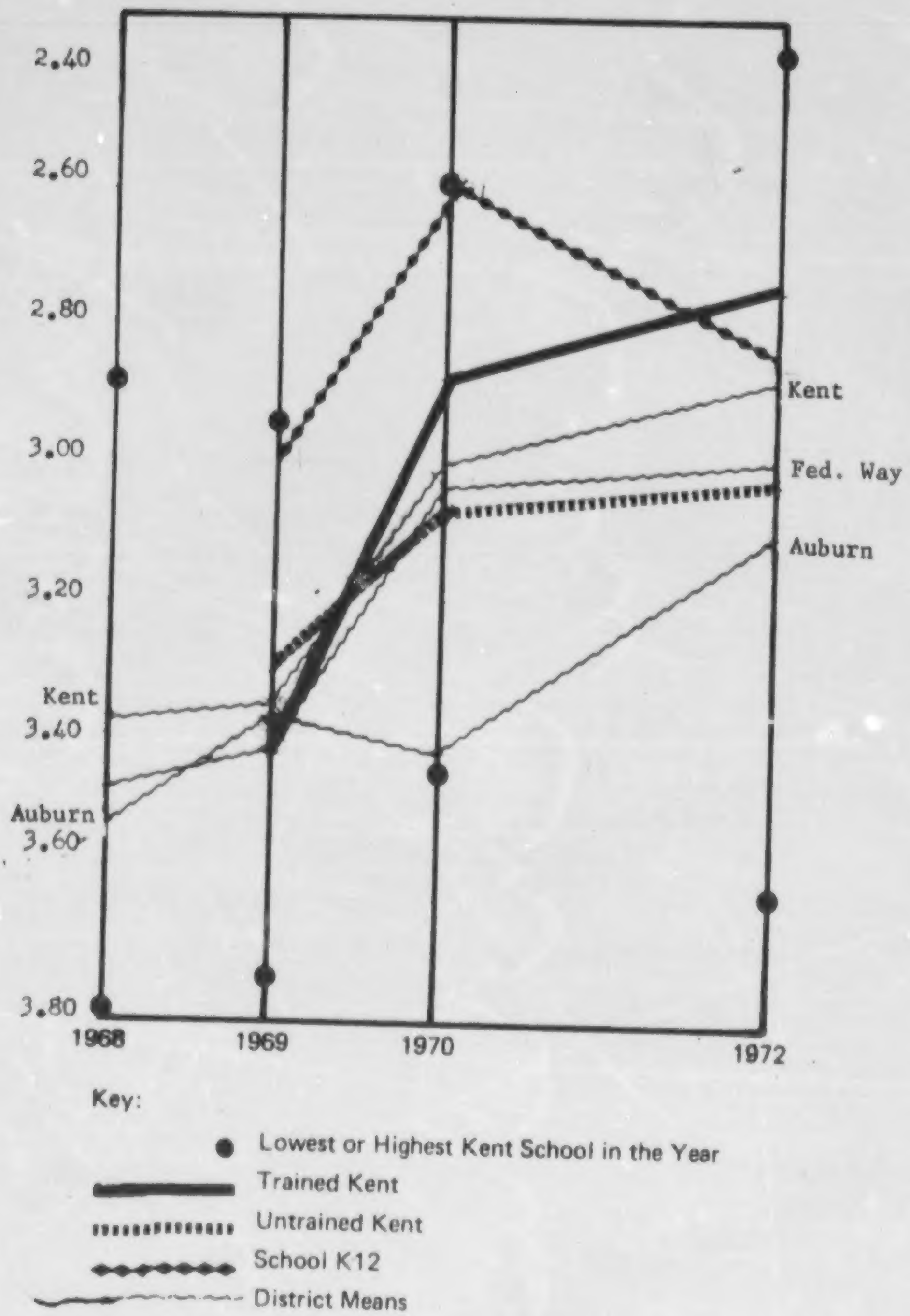
Districts

Kent	3.36	3.33	2.99	2.87
Auburn	3.54	3.35	3.42	3.08
Fed Wy	3.46	3.41	3.02	2.99

Item: Suppose you are in a committee meeting with Teacher X and the other members begin to describe their personal feelings about what goes on in the school; Teacher X listens to them and tells then his own feelings. How would you feel toward X?

( ) I would approve strongly. [1 Favorable]
( ) I would approve mildly or some. [2]
( ) I wouln't care one way or the other. [3]
( ) I would disapprove mildly or some. [4]
( ) I would disapprove strongly. [5 Unfavorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 2



Means of Responses of Teachers-and-others in Elementary Schools
to Item 3

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
K10	3.00	K02	2.95			3.05	K12			
K02	2.58	K12	2.89		K08	2.91				
K09	2.55	K09	2.87			2.84	K05			
K03	2.50	K06	2.80	K11	K06	2.79				
K01, 04	2.42		2.70	Mean		2.78	Mean			
Mean	2.37	K01	2.63			2.72	K11			
K05	2.24		2.58	K05	K09	2.70				
K08	2.17	Mean	2.57		K04	2.67				
K06	2.14	K04	2.52		K10	2.64				
K07	2.04	K03	2.50		Mean	2.59				
		K10	2.48		K07	2.44				
		K07	2.18			2.41	K13			
		K08	2.11		K01, 03	2.40				
					K02	2.32				

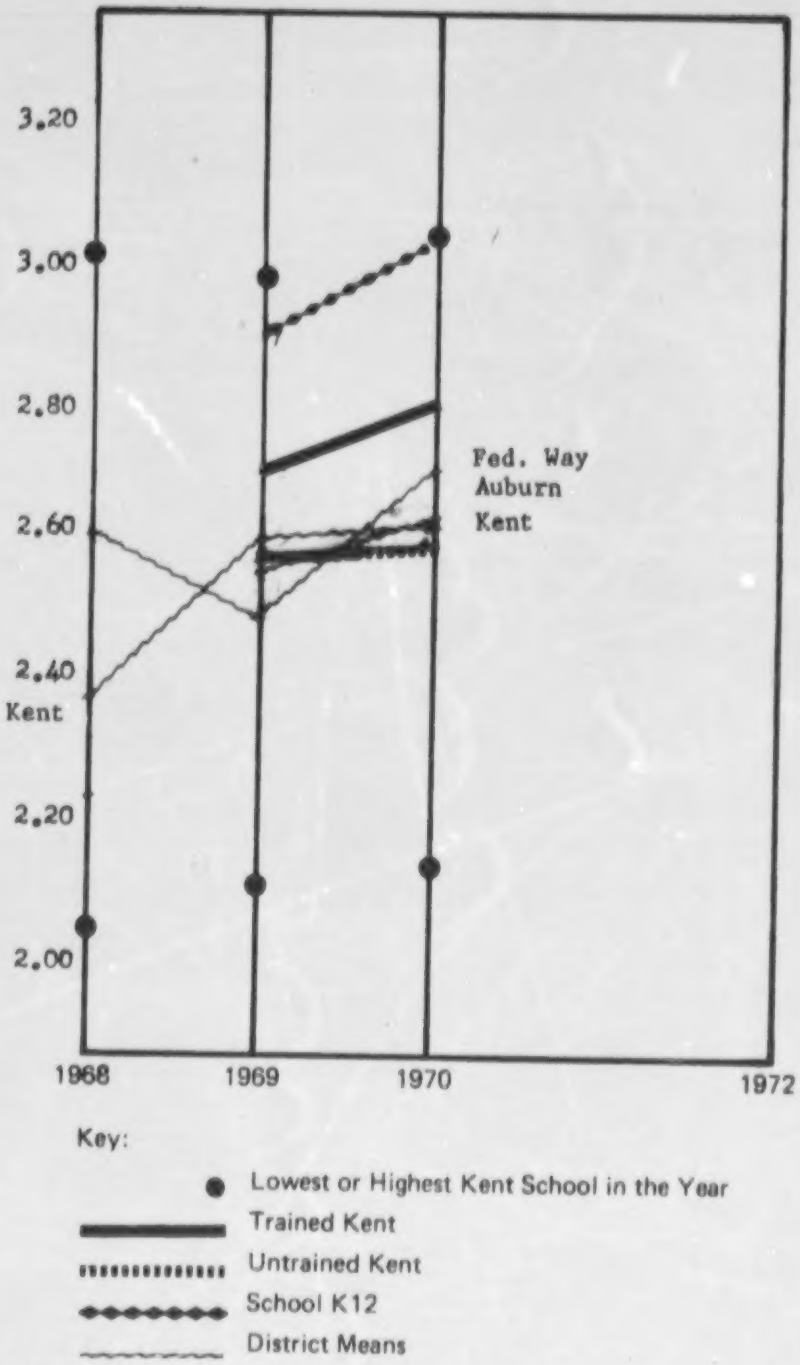
Districts

Kent	2.37	2.59	2.64
Auburn	2.23	2.56	2.65
Fed Wy	2.60	2.48	2.71

Item: Suppose Teacher X werer present when two others got into a hot argument about how the school is run. And suppose Teacher X tried to get them to quiet down and stop arguing. How would you feel about the behavior of Teacher X?

( )	I would approve strongly.	[1 Unfavorable]
( )	I would approve mildly or some.	[2]
( )	I wouldn't care one way or the other.	[3]
( )	I would disapprove mildly or some.	[4]
( )	I would disapprove strongly.	[5 Favorable]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 3



Means of Responses of Teachers-and-others in Elementary Schools to Item 4

Kent elementary schools

1968	
Untr schs	Mean score
K10	1.87
K09	2.06
K01	2.11
K07	2.12
K06	2.25
K05	2.28
Mean	2.29
K04	2.42
K02, 08	2.50
K03	2.64

1969		
Untr schs	Mean score	Trnd schs
K12	1.78	
K03	2.08	K05
	2.11	Mean
K10	2.13	
	2.14	K11
K08	2.20	
Mean	2.23	
K04	2.26	
K02	2.27	
K07	2.31	
K06	2.42	
K09	2.46	

1970		
Untr schs	Mean score	Trnd schs
	1.50	K12
K09	1.76	
K06	1.82	
K03	2.00	
	2.08	Mean
K10	2.14	
	2.25	K13
Mean	2.26	
	2.27	K05
K01	2.35	K11
K04	2.48	
K02, 08	2.50	
K07	2.57	

1972		
Untr schs	Mean score	Trnd schs
	1.81	K12
	2.11	K15
K06	2.12	K14
	2.14	Mean
K10	2.15	
K01	2.19	
	2.00	K11
K07	2.25	
Mean	2.27	
	2.30	K13
K03, 04	2.31	
K08	2.33	
	2.35	K05
	2.42	K02
K09	2.54	

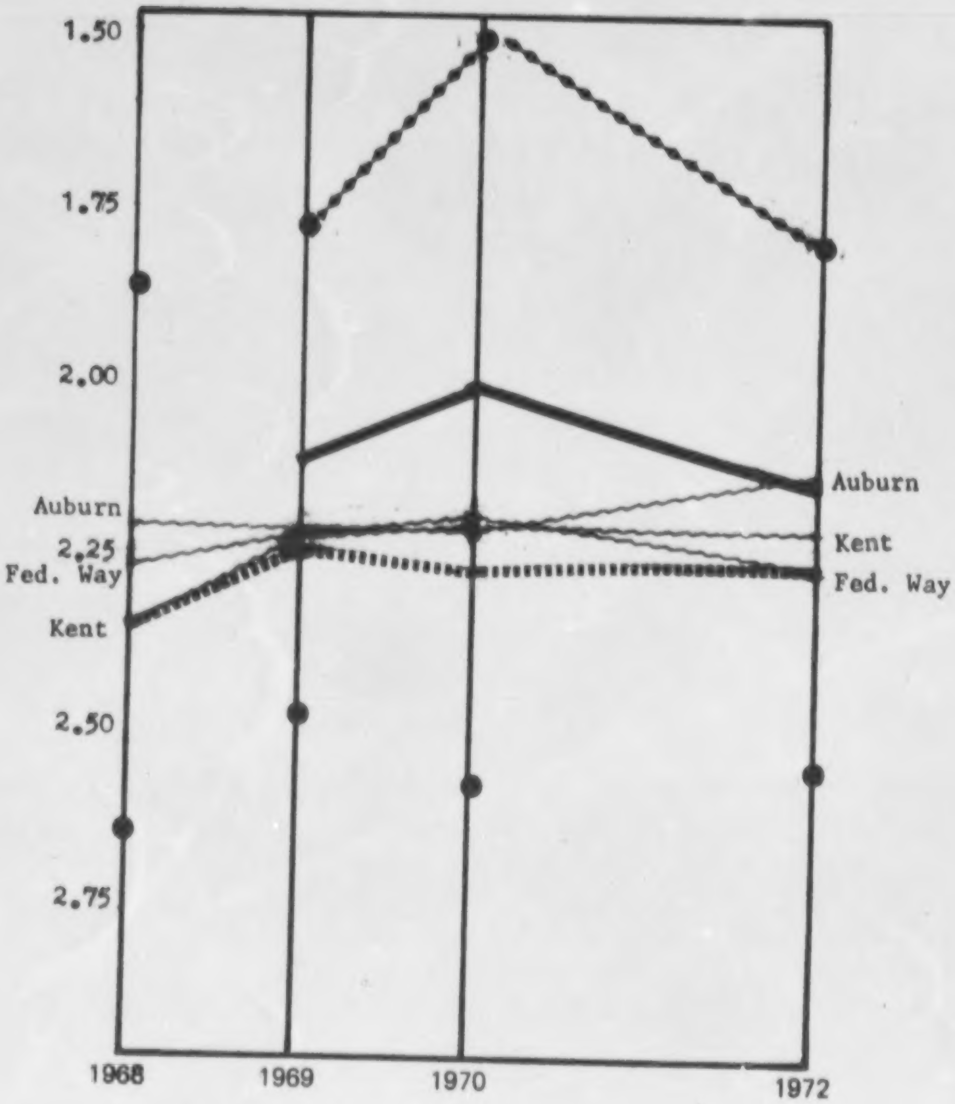
Districts

	1968	1969	1970	1972
Kent	2.29	2.21	2.20	2.21
Auburn	2.20	2.21	2.21	2.13
Fed Wy	2.25	2.21	2.19	2.26

Item: Suppose Teacher X strongly disagrees with something B says at a staff meeting. In Teacher X's place, would most of the teachers you know in your school seek out B to discuss the disagreements?

( ) Yes, I think most would do this. [1 Favorable]
( ) Maybe about half would do this. [2]
( ) No; most would not. [3 Unfavorable]
( ) I don't know. [4 not tallied]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 4



Key:

- ● Lowest or Highest Kent School in the Year
- Trained Kent
- Untrained Kent
- School K12
- District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 5

Kent elementary schools

1968	
Untr schs	Mean score
K09	1.58
K02	1.60
K10	1.67
K06	1.79
Mean	1.80
K01, 07	1.82
K08	1.86
K03	1.88
K04	1.90
K05	2.00

1969		
Untr schs	Mean score	Trnd schs
K03	1.27	
K09	1.42	K11
K12	1.50	
	1.68	Mean
K04	1.78	
K08	1.79	
and Mean		
K10	1.82	
K01	1.85	
K02, 07	2.00	K05
K06	2.17	

1970		
Untr schs	Mean score	Trnd schs
K09	1.32	
	1.44	K13
	1.45	K12
K04	1.57	
	1.61	Mean
	1.69	K05
K03	1.73	
Mean	1.77	
K06	1.79	
	1.80	K11
K01	1.81	
K10	1.83	
K08	1.94	
K02	1.95	
K07	2.00	

1972		
Untr schs	Mean score	Trnd schs
K03	1.21	
K09	1.50	K12
K07	1.67	
K04	1.79	
Mean	1.83	
	1.89	K05
	1.91	K13
K10	1.93	Mean
K01	2.00	K02
	2.06	K14
	2.08	K11
K08	2.13	
	2.17	K15
K06	2.25	

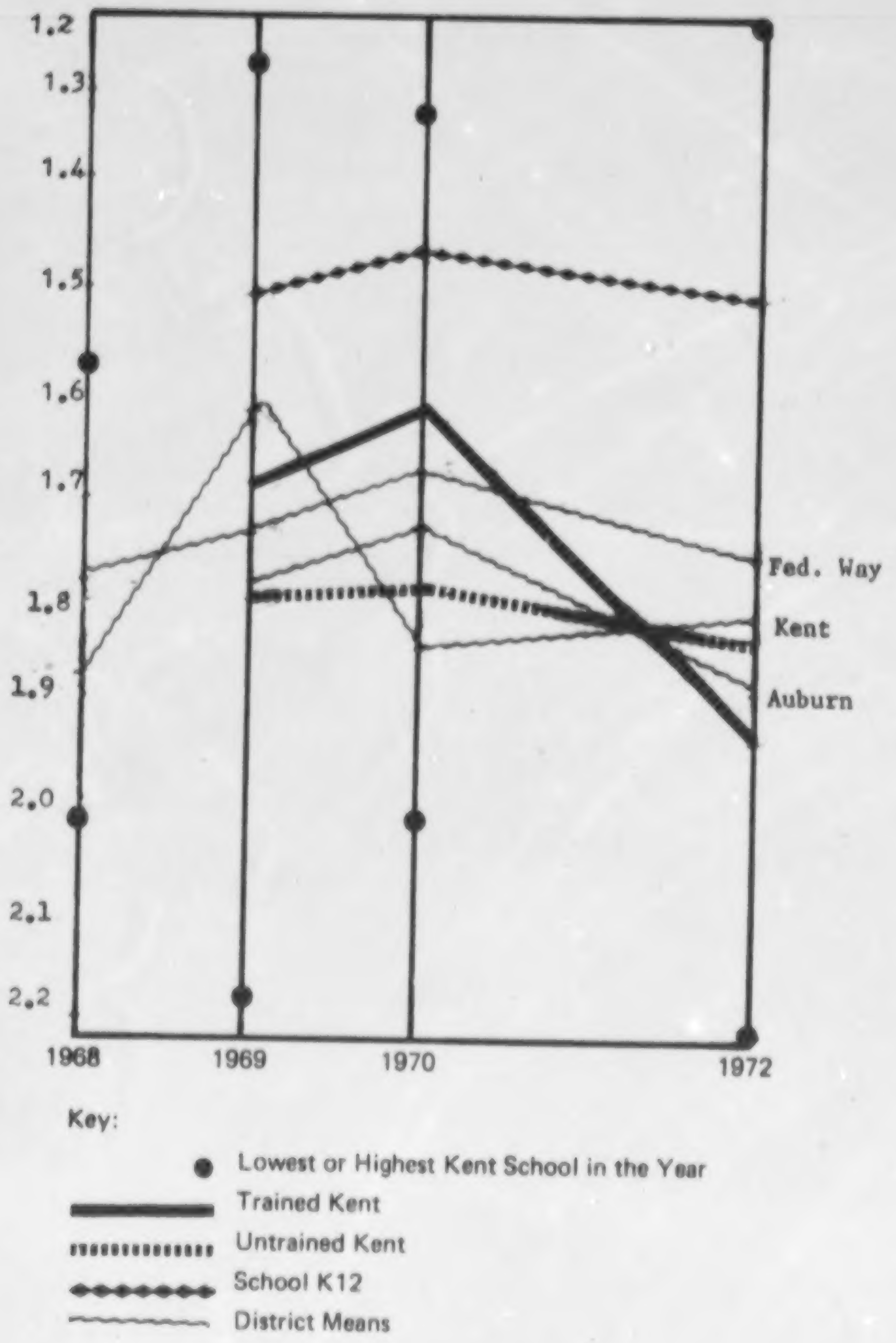
Districts

Kent	1.80	1.77	1.72	1.88
Auburn	1.77	1.73	1.66	1.75
Fed Wy	1.89	1.61	1.84	1.77

Item: Suppose a teacher (let's call him or her Teacher X) is present when two others get into a hot argument about how the school is run. If teachers you know in your school were in Teacher X's place, what would most of them be likely to do? Would they try to help each one in the argument to understand the viewpoint of the other?

( ) Yes, I think most would. [1 Favorable]
( ) Maybe about half would. [2]
( ) No; most would not do this. [3 Unfavorable]
( ) I don't know. [4 Not tallied]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 5



Means of Responses of Teachers-and-others in Elementary Schools

to Item 6

Kent elementary schools

1968

Untr schs	Mean score
K10	2.50
K03	2.00
K07	1.86
K05	1.71
K09	1.70
K02, 08	1.68
Mean	1.67
K01	1.53
K04	1.36
K06	1.21

1969

Untr schs	Mean score	Trnd schs
K02, 12	2.25	K05
K10	2.21	
	2.04	Mean
	1.87	K11
Mean	1.83	
K06	1.80	
K03	1.75	
K08	1.74	
K04	1.68	
K07	1.65	
K09	1.53	
K01	1.44	

1970 *

Untr schs	Mean score	Trnd schs
	2.17	K12
	2.15	K05
K08	2.14	
	2.13	K13
	2.10	Mean
K09	2.00	
K04	1.96	
	1.91	K11
K10	1.88	
Mean	1.83	
K01	1.75	
K07	1.73	
K02	1.69	
K03	1.63	
K06	1.60	

* The difference between 1970 Kent means was significant: t=3.13, df= 11, $p < .01$.

1972

Untr schs	Mean score	Trnd schs
	2.40	K14
	2.10	K05
K07	2.06	
K06	2.00	
	1.95	K15
K10	1.94	
	1.92	K11 and Mean
	1.86	K02
K09	1.77	
K08	1.74	
K03 and Mean	1.73	K12
K01	1.57	
	1.56	K13
K04	1.24	

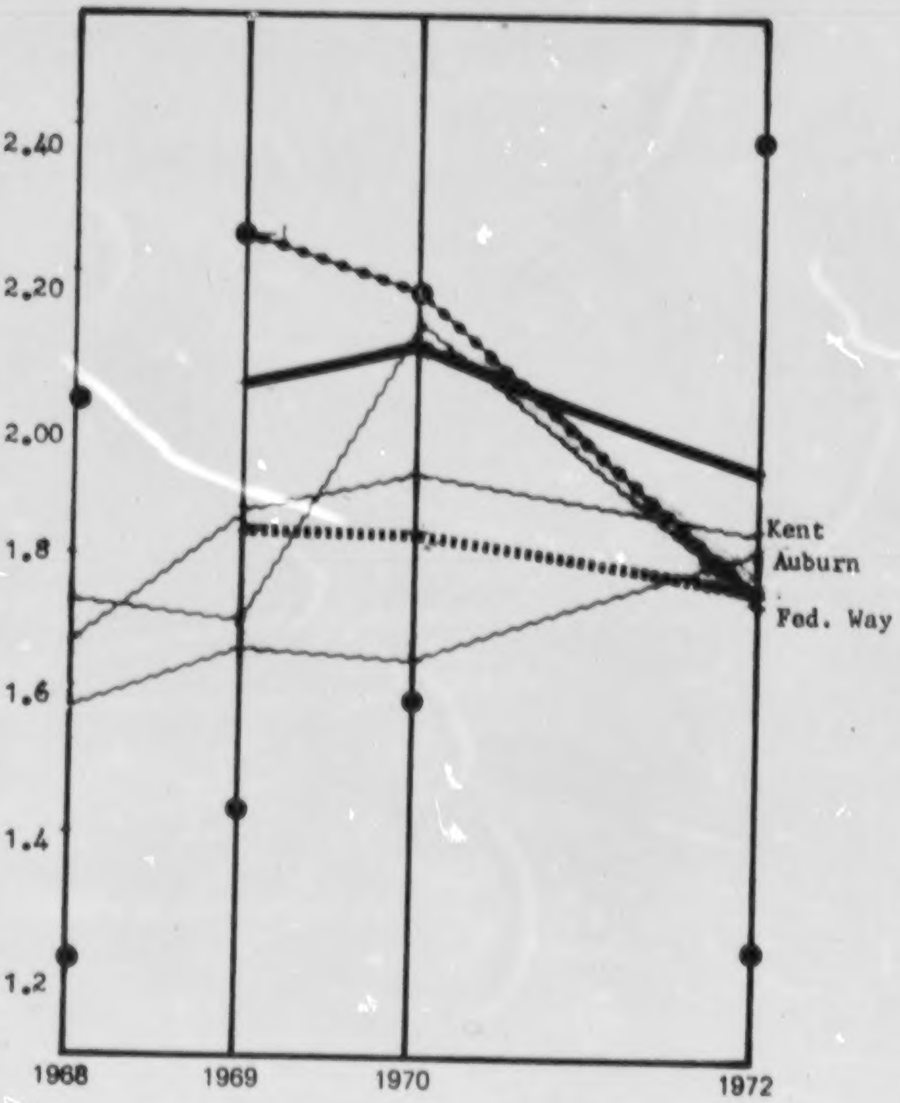
Districts

Kent	1.67	1.86	1.91	1.83
Auburn	1.58	1.67	1.65	1.82
Fed Wy	1.73	1.71	2.13	1.73

Item: Suppose you are in a committee meeting with Teacher X and the other members begin to describe their personal feelings about what goes on in the school; Teacher X quickly suggests that the committee get back to the topic and keep the discussion objective and impersonal. How would you feel toward X?

( )	I would approve strongly.	[1 Unfavorable]
( )	I would approve mildly or some.	[2]
( )	I wouldn't care one way or the other.	[3]
( )	I would disapprove mildly or some.	[4]
( )	I would disapprove strongly.	[5 Favorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 6



Key:

● Lowest or Highest Kent School in the Year

Trained Kent

Untrained Kent

School K12

District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 7

Kent elementary schools

1968

Untr schs	Mean score
K08	2.89
K06	2.86
K05	2.45
Mean, K04	2.19
K07	2.17
K01	2.09
K09	2.00
K02	1.86
K10	1.65
K03	1.46

1969

Untr schs	Mean score	Trnd schs
	4.60	K11
K12	4.00	
K03	3.77	
K04	3.14	
	3.07	Mean
K06	2.93	
K09	2.81	
K10	2.80	
Mean	2.71	
	2.69	K05
K01	2.47	
K07	2.17	
K08	2.05	
K02	1.90	

1970

Untr schs	Mean score	Trnd schs
	3.80	K11
	3.48	K12
	3.43	Mean
K04	3.42	
K10	3.36	
K06	3.25	
	3.24	K05, 13
K09	3.09	
K08	2.96	
Mean	2.88	
K07	2.86	
K02	2.71	
K03	2.70	
K01	1.30	

1972*

Untr schs	Mean score	Trnd schs
K04	4.81	
	4.25	K14
	4.23	K12
	4.00	K02
	3.88	K11
	3.64	Mean
	3.60	K15
K07	3.37	
K06	3.25	
Mean	3.19	
K08	3.16	
	3.07	K13
K10	2.94	
K01	2.86	
K09	2.71	
	2.62	K05
K03	2.00	

* Differences between trained and untrained schools significant by Finney's tables at .05.

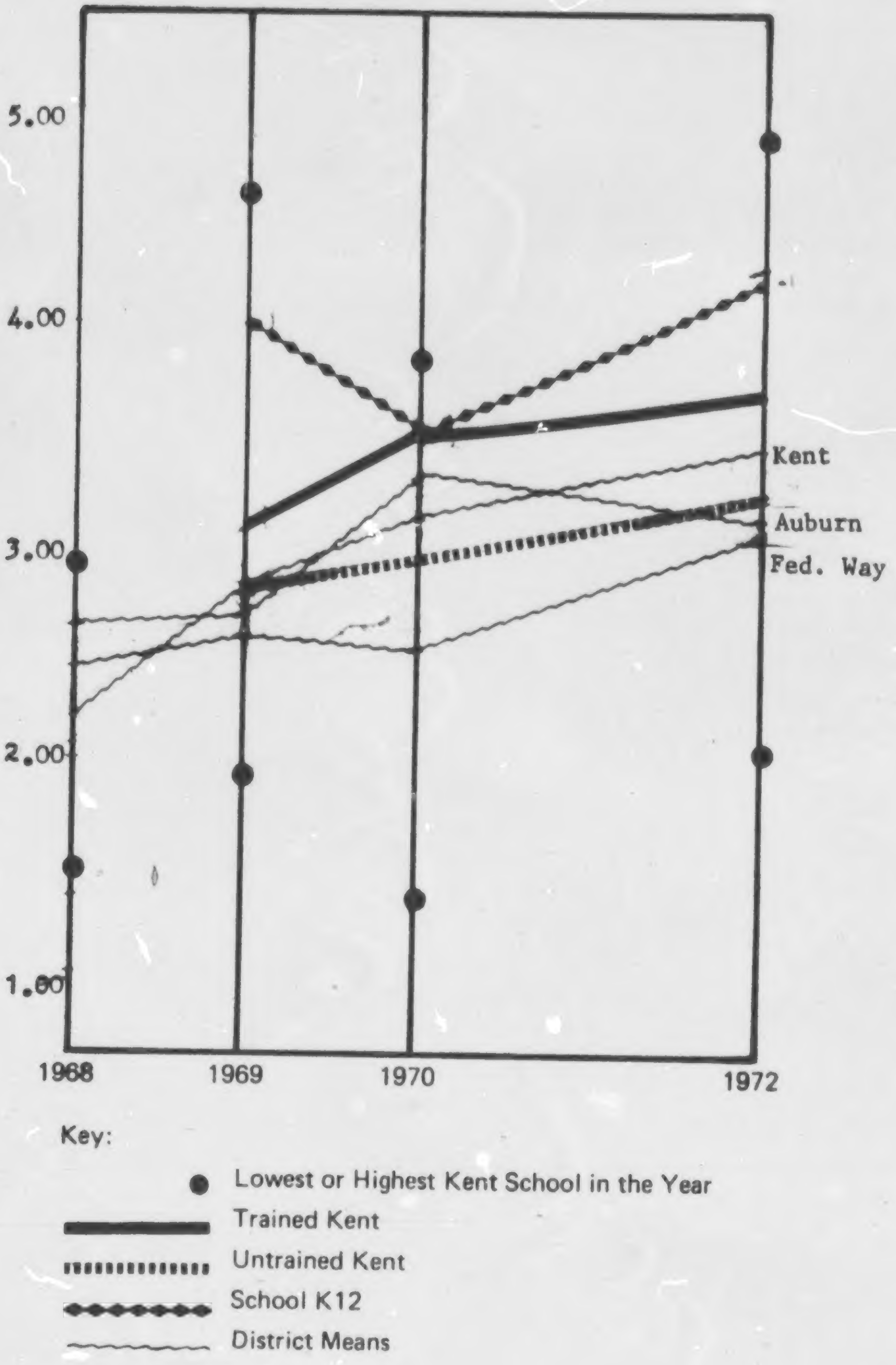
Districts

Kent	2.19	2.76	3.05	3.41
Auburn	2.60	2.62	3.25	3.08
Fed Wy	2.40	2.56	2.45	3.04

Item: Perhaps there are some people in your organization with whom you talk rather frequently about matters important to you. Please think of people with whom you talk seriously about things important to you, inside or outside formal meetings, once a week or more on the average. Write their names below. (If there are fewer than six people with whom you talk once a week about matters important to you, write down only as many as there are; if none, write "none." If there are more than six, list just the six with whom you feel your conversations are the most satisfying.)

Scale: Mean number of names named.

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 7



Item 7, with teachers-and-others: number of different jobs held by people names

Comparing trained elementary schools in Kent with the untrained, the means are the same or almost. The firmest statement that can be made is that trained schools never averaged fewer types of jobs among the mentioned people than the untrained schools:

Elementary school means in Kent:

	1968	1969	1970	1972
Trained	none	1.36	1.51	1.46
Untrained	1.15	1.36	1.43	1.44
Sch K12	none	1.78	1.48	1.68
Range	0.85 to 1.28	0.94 to 2.00	1.11 to 1.80	1.14 to 2.10

Comparing trends among districts: does Kent drop off after 1969 because teams of teachers (with leaders) were being disbanded? Does Auburn drop off after 1970 for the same reason? Why do elementary and JHS in Kent go up again after 1970? I can't find any answers, even hints of answers, to these questions in runs 1, 2, and 3 of item 63 in Tab. 16.

Comparing high schools in Kent: see chart. In 1968-69, I carried on consulting in K-M to enable department heads to talk more regularly with one another about matters important to them. The schedule was rearranged in 1969-70 to make this more possible; during this year, too, the CCs did a little work with department heads there. Does the mean for K-M go up partly because of that little bit of training? Does the mean fall off because the training was not followed up? The data from run 3 support this hypothesis. The percentages naming code 21 (department heads) were zero in K-M (HS 1) in 1968, 15 in 1969, 20 in 1970, and back to zero in 1972. Remember, too, that K-R (HS 2) began in 1968-69 as an experimental school with a great deal of communication being attempted within and between departments. However, the school drew strong criticism from parents, and the first principal was replaced with a "firm hand." This information is consistent with the chart. It is also interesting that the third school came in almost as high as HS 2. The third school is also an experimental school -- this time, one for dropouts from other schools. The third school has a high proportion of CCs on its staff.

Means in schools and districts of responses of principals and other building administrators to item 8: number of names named.

Numbers of Kent elementary schools giving indicated means:

Mean of responses	Freq. in '68	Freq. in '69 Untr	Freq. in '69 Trnd	Freq. in '70 Untr	Freq. in '70 Trnd	Freq. in '72 Untr	Freq. in '72 Trnd
6	0	1	0	1	0	0	0
5	0	2	0	0	0	1	1
4	1	0	0	2	1	1	1
3	0	2	1	1	1	0	0
2	2	1	1	1	3	2	4
1	5	2	0	4	0	0	1
0	3	3	0	0	0	2	0
Means	1.18	2.36	2.50	2.30	2.60	2.17	2.57

Means of districts

Kent:	1.18	2.38	2.40	2.39
Auburn:	2.43	2.33	2.00	4.00
Fed Wy:	1.78	2.33	2.12	4.20

The values in 1972 for Auburn and Fed Way baffle me. They are "way out." The value of Auburn in 1968 also seems nonconforming. Except for 1972, Fed Way follows the profile of Kent. Why not Auburn?

Item 8, with principals and other building administrators: number of different jobs held by persons named

No pattern or disproportion whatever.

Findings from run 3: kinds of jobs people named

The percentages of principals mentioning persons in various types of jobs are shown below. The table is for Kent only.

		1969		1970		1972	
	1968	Untr	Trnd	Untr	Trnd	Untr	Trnd
0 etc. Central office personnel	50	42	40	22	39	8	39
1 etc. Prin. and other bldg. admin.	7	12	0	4	8	0	0
2 etc. Teachers-and-others	29	46	40	70	46	54	56
3 etc. Secys, custodians, etc.	0	0	0	0	0	0	0
4 etc. Misc.	14	0	20	4	8	39	6

The figures for untrained schools mentioning code 2 are inscrutable. It surprises me that the importance of secretaries is so low. The only trend I see worth speculating about is the contrast in code 0 between untrained and trained schools: 42, 22, 8 versus 40, 39, 39. Did both untrained and trained schools get more "honest" between pretest and first posttest? Did untrained schools continue to get more "honest?" -- while the figures for trained schools represent actual communication with central office? Other wise, why should one trend continue downward while the other stays at the same level? But this interpretation may be too tempting. Look at code 4. Here we seem to see an increasing trend for untrained schools and a decreasing trend for trained schools. But how can it be interpreted? Maybe the cautious course is to ignore this entire table.

Means of Responses of Teachers-and-others in Elementary Schools to Item 9

Kent elementary schools

1968

Untr schs	Mean score
K04	1.42
K08	1.68
K05	1.76
K10	1.83
Mean, 07	1.87
K04	1.94
K06	2.00
K09	2.05
K02	2.10
K03	2.17

1969

Untr schs	Mean score	Trnd schs
K12	1.25	
	1.33	K11
K07, 04	1.41	
K06	1.53	
K03	1.54	
	1.56	Mean
K09	1.60	
K08	1.63	K05
Mean	1.64	
K01	1.69	
K02	1.85	
K10	2.08	

1970

Untr schs	Mean score	Trnd schs
	1.09	K12
K07	1.23	
K08	1.32	
K03	1.44	
K04	1.50	
Mean	1.52	K11
K02	1.54	
K09, 06	1.55	
	1.56	Mean
	1.64	K05
K10	1.68	
K01	1.85	
	2.12	K13

1972

Untr schs	Mean score	Trnd schs
	1.14	K12, 02
K03	1.25	
	1.27	K13
K04	1.29	
K06	1.30	
	1.33	K05
	1.37	Mean
	1.40	K11
K08	1.42	
K07	1.50	
	1.55	K14
Mean	1.56	
K01	1.71	
	1.74	K15
K10	1.94	
K09	2.12	

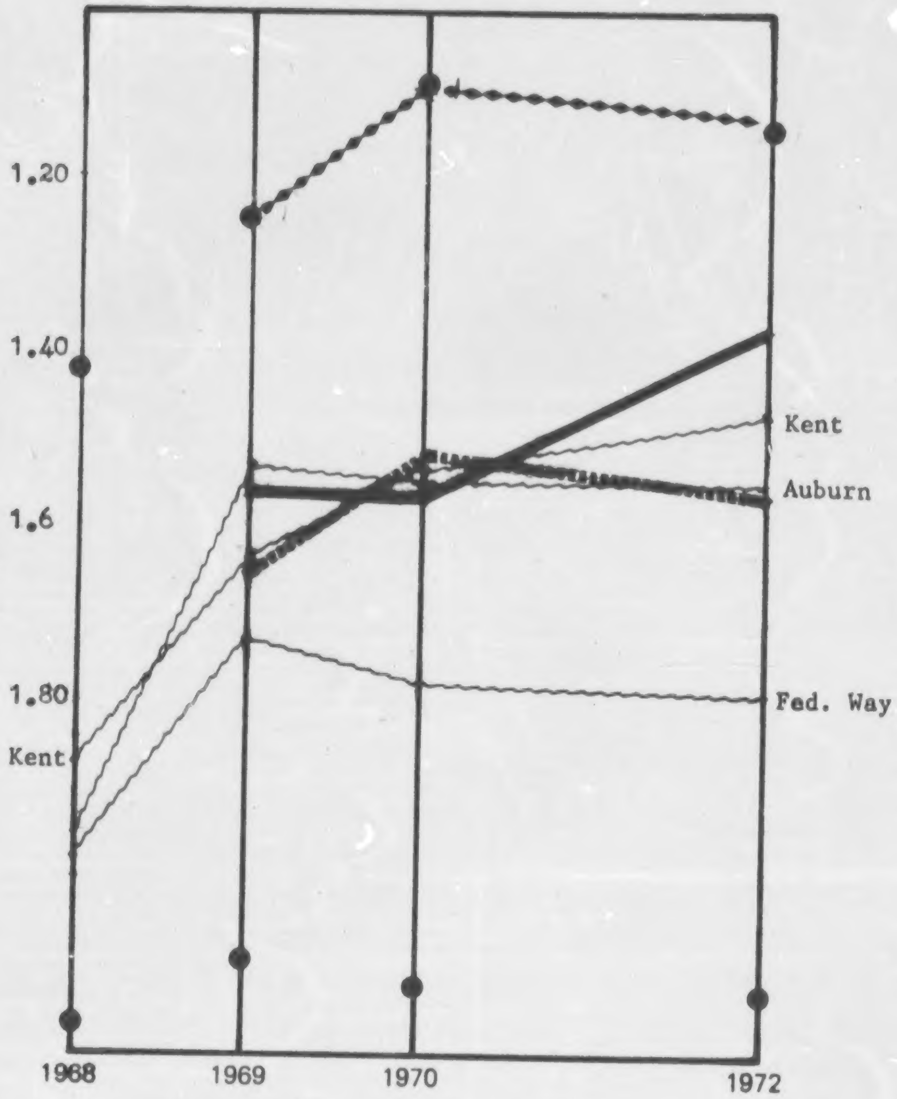
Districts

Kent	1.87	1.63	1.53	1.46
Auburn	1.95	1.53	1.55	1.55
Fed Wy	1.98	1.72	1.77	1.78

Item: Suppose Teacher X wants to improve his classroom effectiveness. If X asked another teacher to observe his teaching and then have a conference about it afterward, how would you feel toward X?

( ) I would approve strongly. [1 Favorable]
( ) I would approve mildly or some. [2]
( ) I wouldn't care one way or the other. [3]
( ) I would disapprove mildly or some. [4]
( ) I would disapprove strongly. [5 Unfavorable]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 9



Key:

- ● Lowest or Highest Kent School in the Year
- ▬ Trained Kent
- ▮▮▮ Untrained Kent
- ◆◆◆ School K12
- ~~~ District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 10

Kent elementary schools

1968	
Untr schs	Mean score
K10	1.56
K01	1.63
K05	1.73
K04, 08	1.75
K06	1.77
K09	1.79
K07	1.81
Mean	1.82
K02	2.15
K03	2.64

1969		
Untr schs	Mean score	Trnd schs
K12	1.33	
K09	1.64	
K04	1.67	
K01	1.71	
K03	1.75	K05
	1.77	Mean
K08	1.78	
	1.79	K11
K06	1.80	
Mean	1.84	
K10	1.91	
K02	2.06	
K07	2.41	

1970		
Untr schs	Mean score	Trnd schs
	1.45	K12
K09	1.50	
	1.66	K13
	1.67	Mean
K02, 04	1.71	
	1.72	K05
K03	1.75	
K06	1.76	
K10	1.78	
	1.81	K11
Mean	1.84	
K01	1.94	
K07	2.10	
K08	2.33	

1972		
Untr schs	Mean score	Trnd schs
	1.27	K12
K09	1.31	
K03	1.33	
	1.67	K14
K10	1.75	
Mean	1.83	
K04	1.84	
	1.86	K02
K06	1.90	
	1.91	Mean, K11
K08	1.94	
K07	2.13	
	2.14	K13
K01	2.22	
	2.24	K05
	2.32	K15

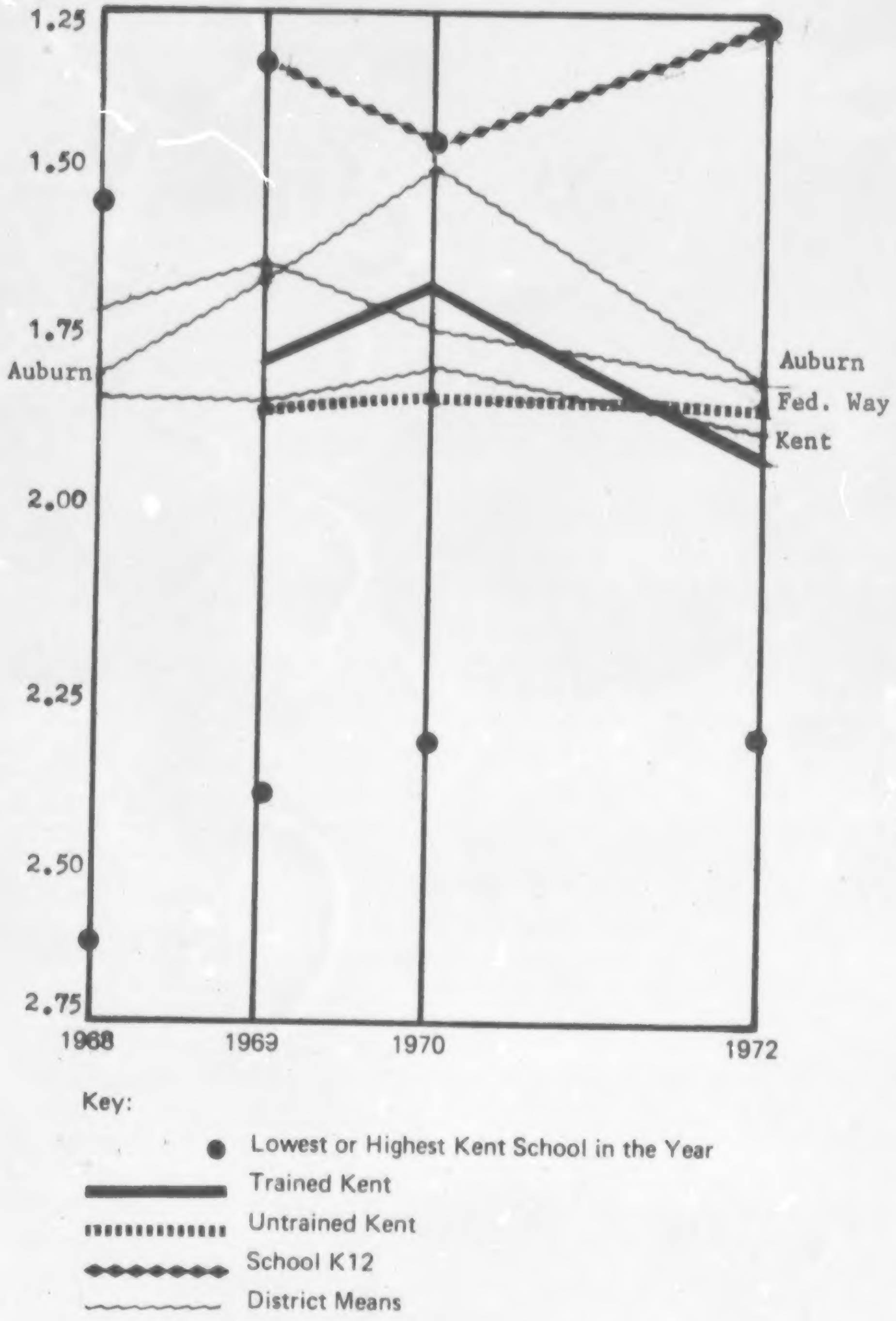
Districts

Kent	1.82	1.83	1.78	1.87
Auburn	1.80	1.65	1.50	1.81
Fed Wy	1.70	1.63	1.73	1.81

Item: Suppose Teacher X develops a particularly useful and effective method for teaching something. In Teacher X's place, would most of the teachers you know in your school describe it briefly at a faculty meeting and offer to meet with others who wanted to hear more about it?

( ) Yes, I think most would do this. [1 Favorable]
( ) Maybe about half would do this. [2]
( ) No; most would not. [3 Unfavorable]
( ) I don't know. [not tallied]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 10



Means of Responses of Teachers-and-others in Elementary Schools to Item 11

Kent elementary schools

1968	
Untr schs	Mean score
K04	2.48
K01	2.61
K06	2.64
K08	2.71
Mean	2.72
K05, 09	2.73
K02	2.85
K10, 07	2.90
K03	3.00

1969		
Untr schs	Mean score	Trnd schs
K03	2.18	
K09	2.45	
	2.50	K11
K12	2.57	
K06	2.58	
	2.59	Mean
K10	2.60	
	2.70	K05
Mean	2.72	
K04	2.84	
K01	2.87	
K07	2.88	
K02, 08	2.93	

1970		
Untr schs	Mean score	Trnd schs
	1.86	K12
K09	2.37	
K03	2.41	
	2.46	Mean
	2.48	K05
K06	2.58	
K10	2.66	
Mean	2.67	
K02	2.68	
	2.71	K11
K04	2.76	
K01	2.81	K13
K07	2.83	
K08	2.84	

1972		
Untr schs	Mean score	Trnd schs
	1.54	K12
K03	2.00	
K04	2.05	
	2.18	K14
	2.36	K02
	2.37	Mean
K06	2.50	
	2.53	K05
Mean	2.54	
	2.65	K15
K08	2.68	K13
K09	2.71	K11
K01	2.76	
K07	2.81	
K10	2.88	

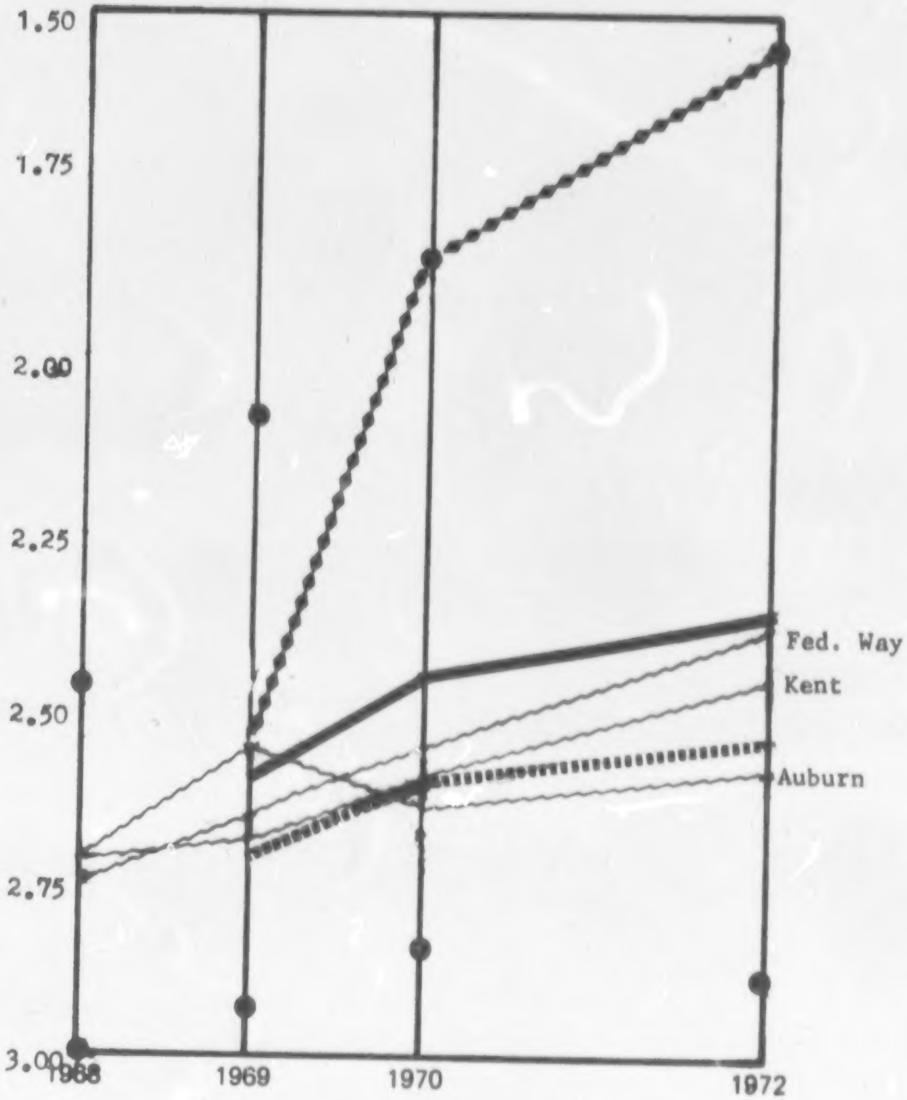
Districts

	1968	1969	1970	1972
Kent	2.72	2.70	2.60	2.46
Auburn	2.75	2.66	2.56	2.38
Fed Wy	2.73	2.56	2.65	2.59

Item: Suppose Teacher X wants to improve his classroom effectiveness. In Teacher X's place, would most of the teachers you know in your building... ask another teacher to observe his teaching and then have a conference afterward?

( ) Yes, I think most would do this. [1 Favorable]
( ) Maybe about half would do this. [2]
( ) No; most would not. [3 Unfavorable]
( ) I don't know. [not tallied]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 11



Key:

● Lowest or Highest Kent School in the Year

▬ Trained Kent

▪▪▪▪ Untrained Kent

◆◆◆◆ School K12

~~~ District Means
~~~

Means of Responses of Teachers-and-others in Elementary Schools to Item 12

Kent elementary schools

1968	
Untr schs	Mean score
K06	1.57
K08	1.60
K10	1.69
K01	1.79
K07	1.83
K04	1.87
Mean	1.89
K05, 09	2.10
K03	2.17
K02	2.20

1969		
Untr schs	Mean score	Trnd schs
K12	1.22	
	1.40	K11
K10	1.48	
K03	1.50	
	1.52	Mean
K06, 08	1.53	
Mean	1.64	
K07	1.67	K05
K01	1.69	
K04	1.71	
K09	1.80	
K02	2.05	

1970		
Untr schs	Mean score	Trnd schs
	1.10	K12
K09	1.43	
K06	1.45	
K02	1.46	
K04	1.50	
	1.53	K05
K08	1.55	
K07	1.57	
	1.58	Mean
Mean	1.60	
K10	1.72	
	1.83	K11
K03	1.93	
K01	1.95	
	2.06	K13

1972		
Untr schs	Mean score	Trnd schs

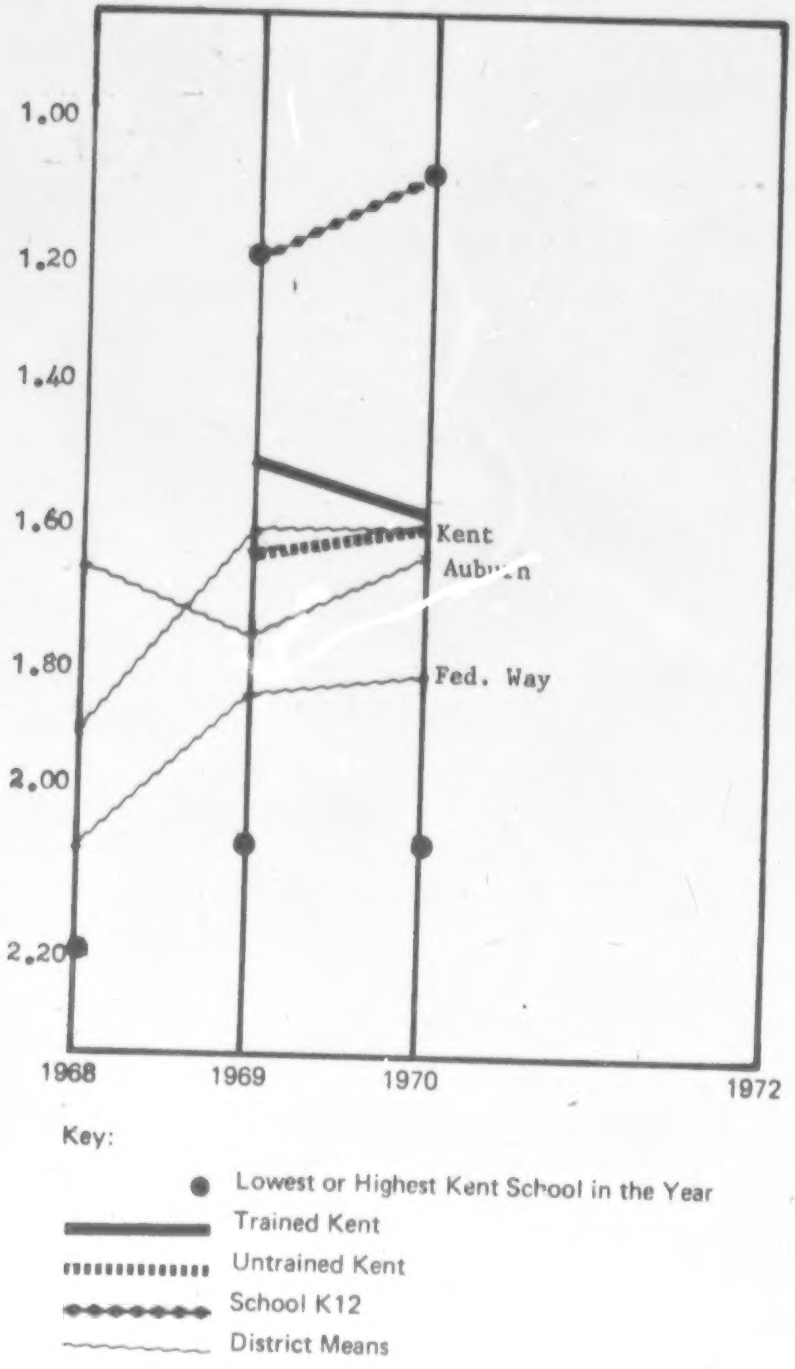
Districts

Kent	1.89	1.62	1.60
Auburn	1.67	1.77	1.63
Fed Wy	2.07	1.85	1.82

Item: Suppose Teacher X were present when two others got into a hot argument about how the school is run. Suppose Teacher X tried to help each one to understand the views of the other. How would you feel about the behavior of Teacher X?

( ) I would approve strongly. [1 Favorable]
( ) I would approve mildly or some. [2]
( ) I wouldn't care one way or the other. [3]
( ) I would disapprove mildly or some. [4]
( ) I would disapprove strongly. [5 Unfavorable]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 12



Means of Responses of Teachers-and-others in Elementary Schools to Item 13

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
K01	2.72	K12	2.44			2.68	K12			
K10	2.57	K01	2.33		K09	2.62				
K03	2.44	K04	2.25			2.54	K13			
K06	2.33	K10	2.19			2.36	Mean			
K08	2.23		2.18	K05		2.35	K11			
K05	2.18	K06	2.17		K03	2.29				
Mean	2.16		2.12	Mean	K06	2.17				
K04,07, 09	2.00	Mean	2.11		K10	2.14				
K02	1.46	K02	2.07	K11	Mean	2.11				
		K03, 07,08	2.00		K07	2.10				
		K09	1.69		K04	2.05				
						2.04	K05			
					K02	2.00				
					K01	1.94				
					K08	1.81				

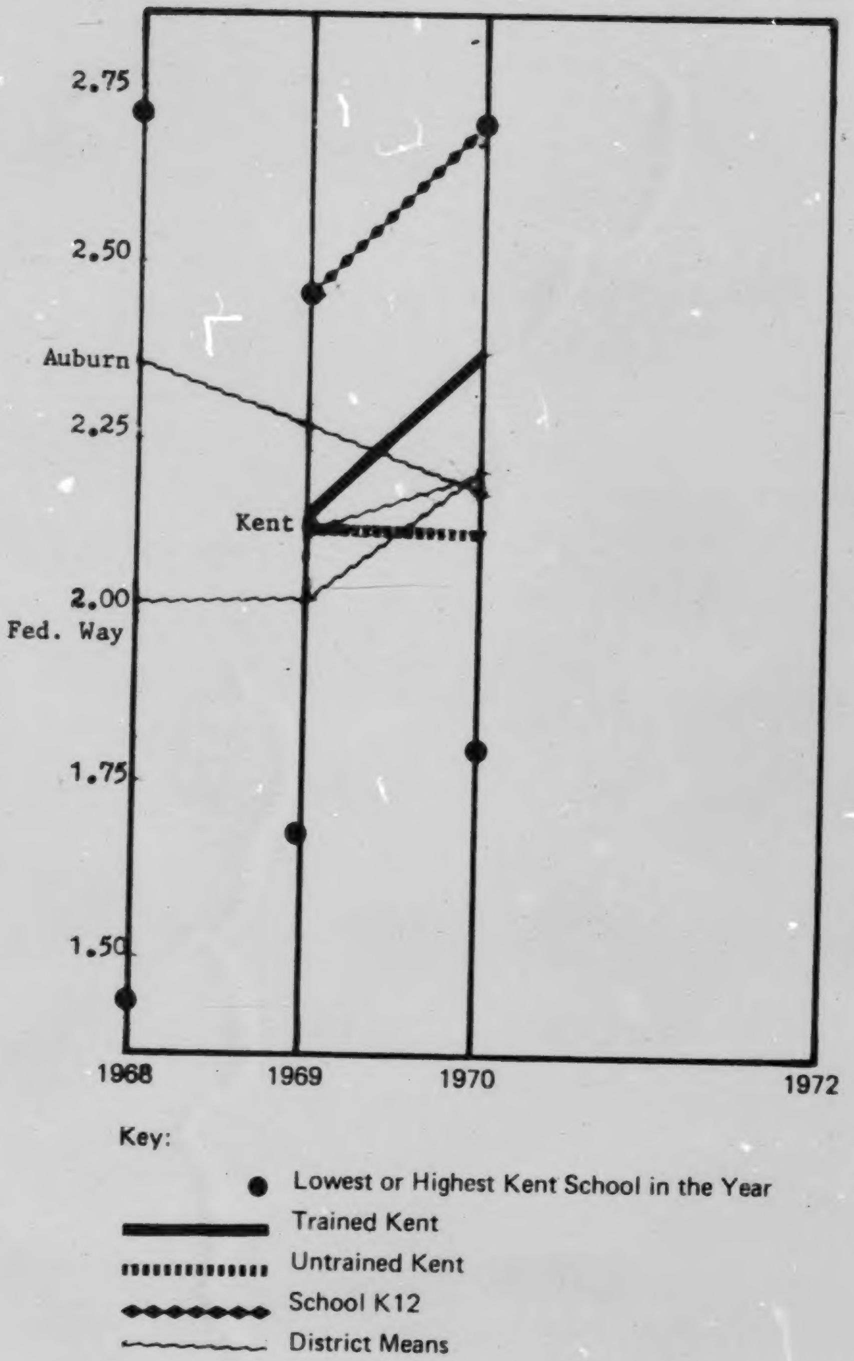
Districts

Kent	2.16	2.11	2.19
Auburn	2.36	2.26	2.15
Fed Wy	2.03	2.06	2.20

Item: Suppose Teacher X strongly disagrees with something B says at a staff meeting. In Teacher X's place, would most most of the teachers you know in your school keep it to themselves and say nothing about it?

( ) Yes, I think most would do this.	[1 Unfavorable]
( ) Maybe about half would do this.	[2]
( ) No; most would not.	[3 Favorable]
( ) I don't know.	[not tallied]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 13



Means of Responses of Teachers-and-others in Elementary Schools to Item 14

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
K01	2.11	K12	1.62			1.60	K12			
K08	2.14	K09, 03	1.82			1.99	Mean			
K10, 09	2.20	K04	1.94			2.00	K05			
K06	2.25		2.00	K11		2.06	K11			
Mean	2.29	K08	2.14		K01	2.11				
K04	2.32	Mean	2.19		K08	2.14				
K07	2.35		2.21	Mean	K10, 09	2.20				
K03	2.37	K06	2.31		K06	2.25				
K05	2.48	K10	2.38		Mean	2.29				
K02	2.58	K01	2.43		K04	2.32				
			2.50	K05	K07	2.35				
		K07	2.56		K03	2.37				
		K02	2.58			2.40	K13			
					K05	2.47				
					K02	2.58				

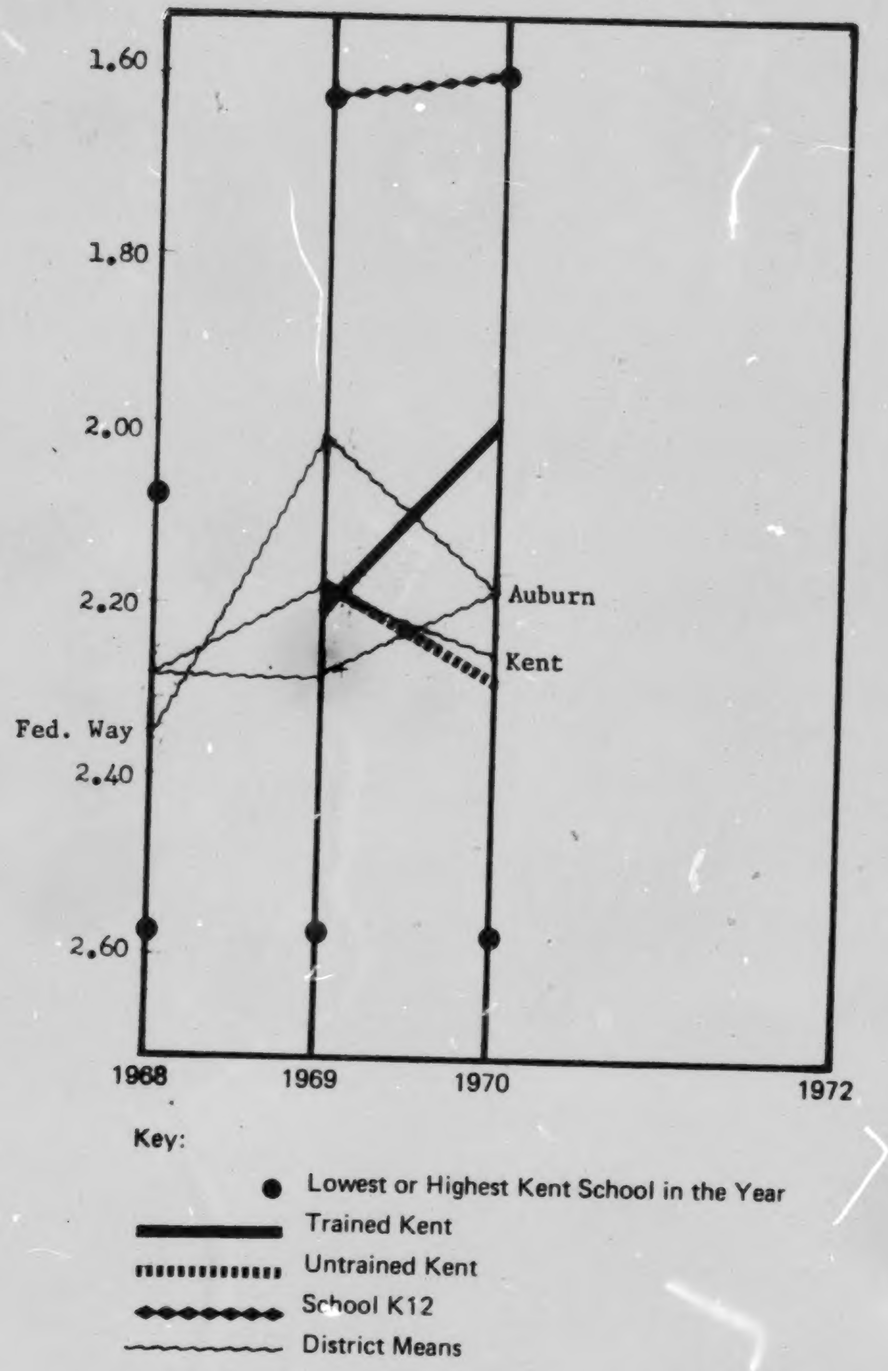
Districts

Kent	2.29	2.19	2.26
Auburn	2.29	2.25	2.19
Fed Wy	2.35	2.00	2.20

Item: Suppose Teacher X wants to improve his classroom effectiveness. In Teacher X's place, would most of the teachers you know in your building ask other teachers to let him (Teacher X) observe how the other teachers teach, to get ideas how to improve their own?

( )	Yes, I think most would do this.	[1 Favorable]
( )	Maybe about half would do this.	[2]
( )	No; most would not.	[3 Unfavorable]
( )	I don't know.	[not tallied]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 14



Means of Responses of Teachers-and-others in Elementary Schools to Item 15

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
K10	2.14	K12	1.71			2.10	K12			
K07	2.17	K01	2.07		K09	2.11				
K02	2.25	K09	2.10			2.23	K13			
K09	2.27	K08	2.14			2.29	Mean			
K01	2.35		2.23	K11	K04	2.30				
Mean	2.43	Mean	2.29			2.31	K05			
K08	2.45	K04	2.31		K01	2.41				
K05	2.50	K07	2.33	Mean	K03, 02	2.43				
K04	2.54	K06	2.36		Mean	2.44				
K03	2.80		2.45	K05	K08	2.45				
K06	2.82	K10	2.47		K10	2.48				
		K03	2.50			2.53	K11			
		K02	2.62		K07	2.68				
					K06	2.71				

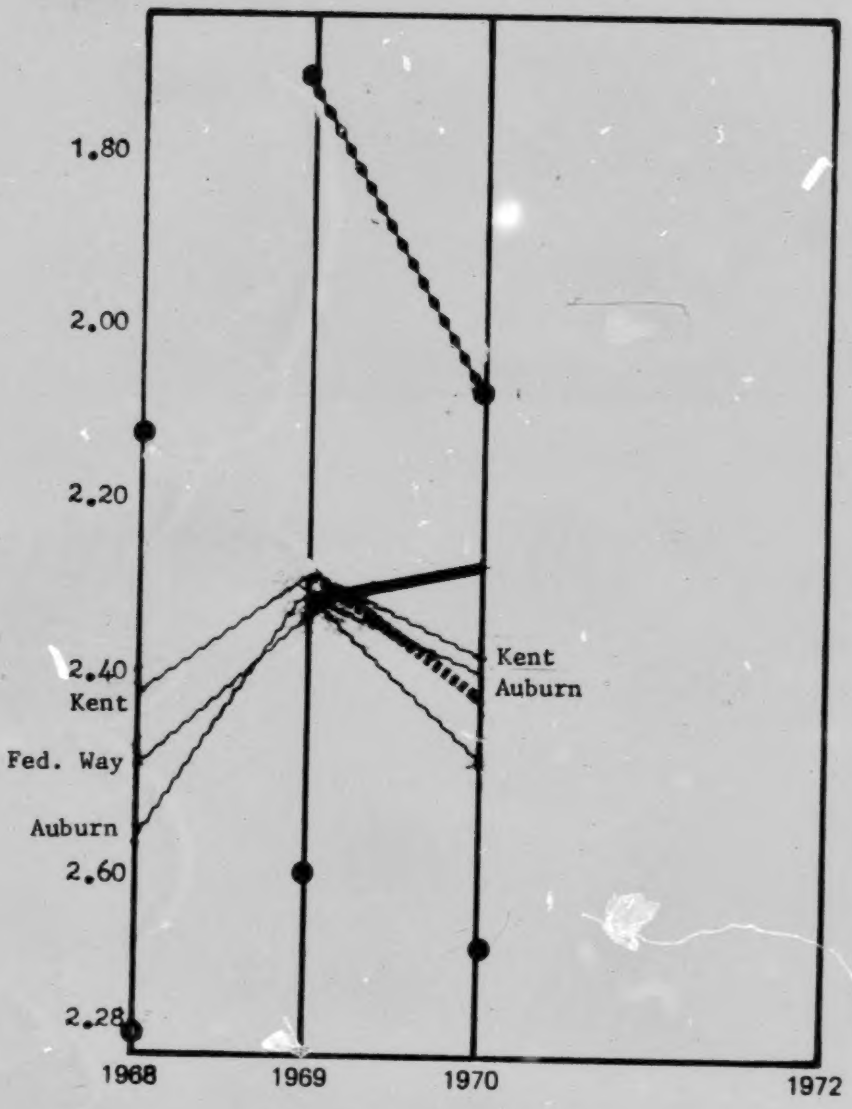
Districts

Kent	2.43	2.30	2.39
Auburn	1.59	2.33	2.41
Fed Wy	2.52	2.34	2.52

Item: Suppose Teacher X developes a particularly useful and effective method for teaching something. In Teacher X's place, would most of the teachers you know in your school try to get administration backing for a project to get other teachers to use the method?

( ) Yes, I think most would do this. [1 Favorable]
( ) Maybe about half would do this. [2]
( ) No; most would not. [3 Unfavorable]
( ) I don't know. [not tallied]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 15



Key:

- ● Lowest or Highest Kent School in the Year
- ▬ Trained Kent
- ▪▪▪▪ Untrained Kent
- ◆◆◆◆ School K12
- ~~~~ District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 16

Kent elementary schools

1968	
Untr schs	Mean score
K02	1.83
K06	1.85
K08	1.88
K05	1.95
K09	2.00
Mean	2.20
K10	2.40
K04	2.41
K07	2.56
K03	2.62
K01	2.71

1969		
Untr schs	Mean score	Trnd schs
K12	1.56	
K09	1.91	
K03	2.00	K05
K08	2.06	
	2.25	Mean
K06	2.38	
Mean	2.39	
K04	2.47	
	2.50	K11
K02	2.62	
K10	2.69	
K01	2.80	
K07	2.81	

1970		
Untr schs	Mean score	Trnd schs
K09	1.60	
K03	1.79	
	1.84	K12
K04	1.90	
K06	1.94	
	2.00	K05
	2.16	Mean
K08	2.21	
Mean	2.22	
	2.39	K11
K02	2.44	
K01	2.47	
K10	2.48	
	2.60	K13
K07	2.90	

1972		
Untr schs	Mean score	Trnd schs

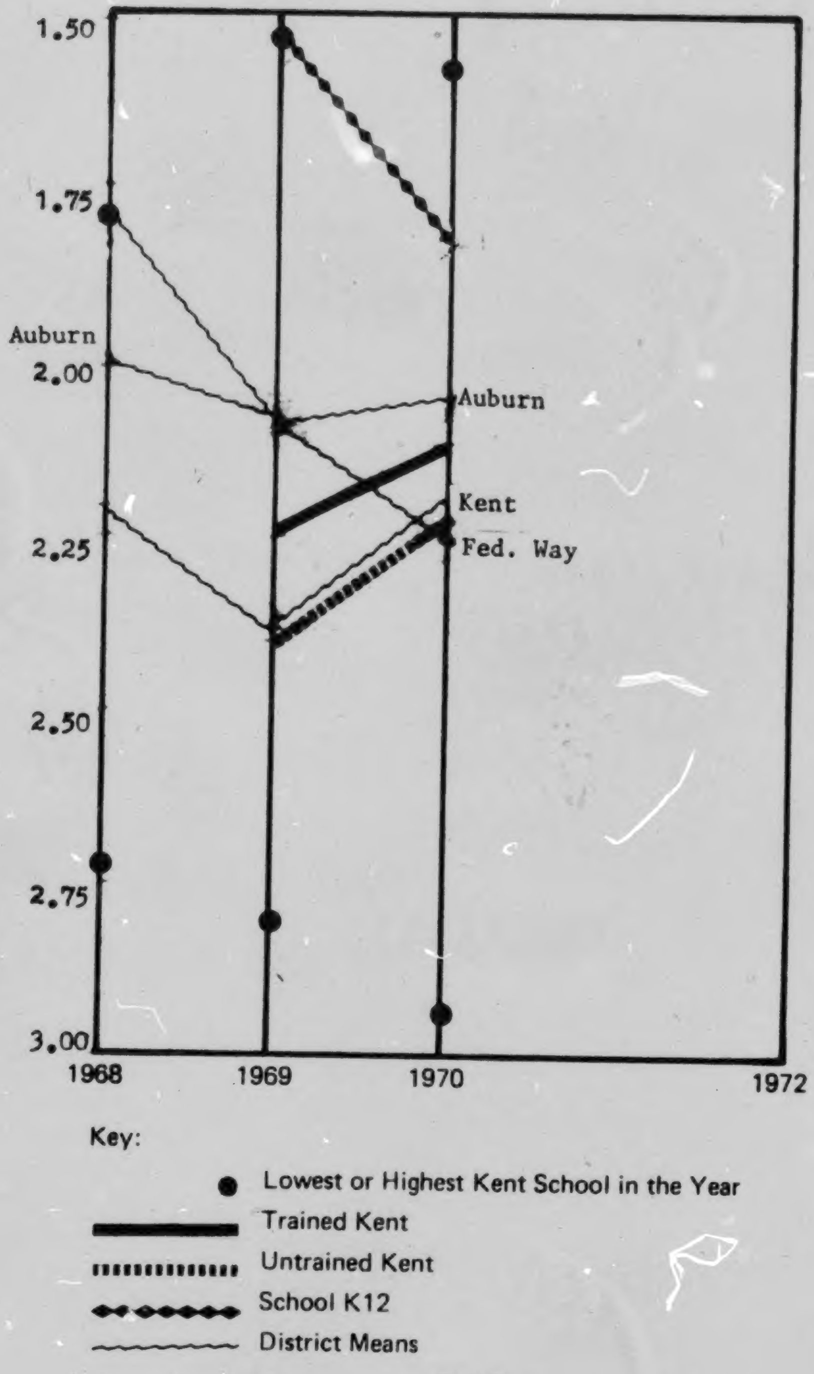
Districts

Kent	2.20	2.37	2.20
Auburn	1.99	2.13	2.09
Fed Wy	1.81	2.12	2.27

Item: Suppose Teacher X wants to improve his classroom effectiveness. In Teacher X's place, would most of the teachers you know in your building ask the principal to observe his teaching and then have a conference afterward?

( ) Yes, I think most would do this. [1 Favorable]
( ) Maybe about half would do this. [2]
( ) No; most would *not*. [3 Unfavorable]
( ) I don't know. [not tallied]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 16



Means of Responses of Teachers-and-others in Elementary Schools to Item 17

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
K01	1.32	K12	1.13	K11		1.17	K12			
K08	1.64	K07	1.41		K07	1.27				
K06	1.71		1.44	Mean		1.38	K11			
K09	1.75	K03	1.46		K09, 03	1.50				
K05	1.81	K09, 06	1.60			1.53	Mean			
Mean, 07	1.82	K08	1.63		K02	1.54				
K04	1.84	K04	1.64			1.55	K05			
K10	1.92	Mean	1.66		K04	1.58				
K03	2.25	K01	1.69		K06	1.60				
K02	2.35		1.83	K05	Mean	1.61				
		K02	1.90		K08	1.64				
		K10	2.00		K10	1.92				
					K01	1.95				
						2.18	K13			

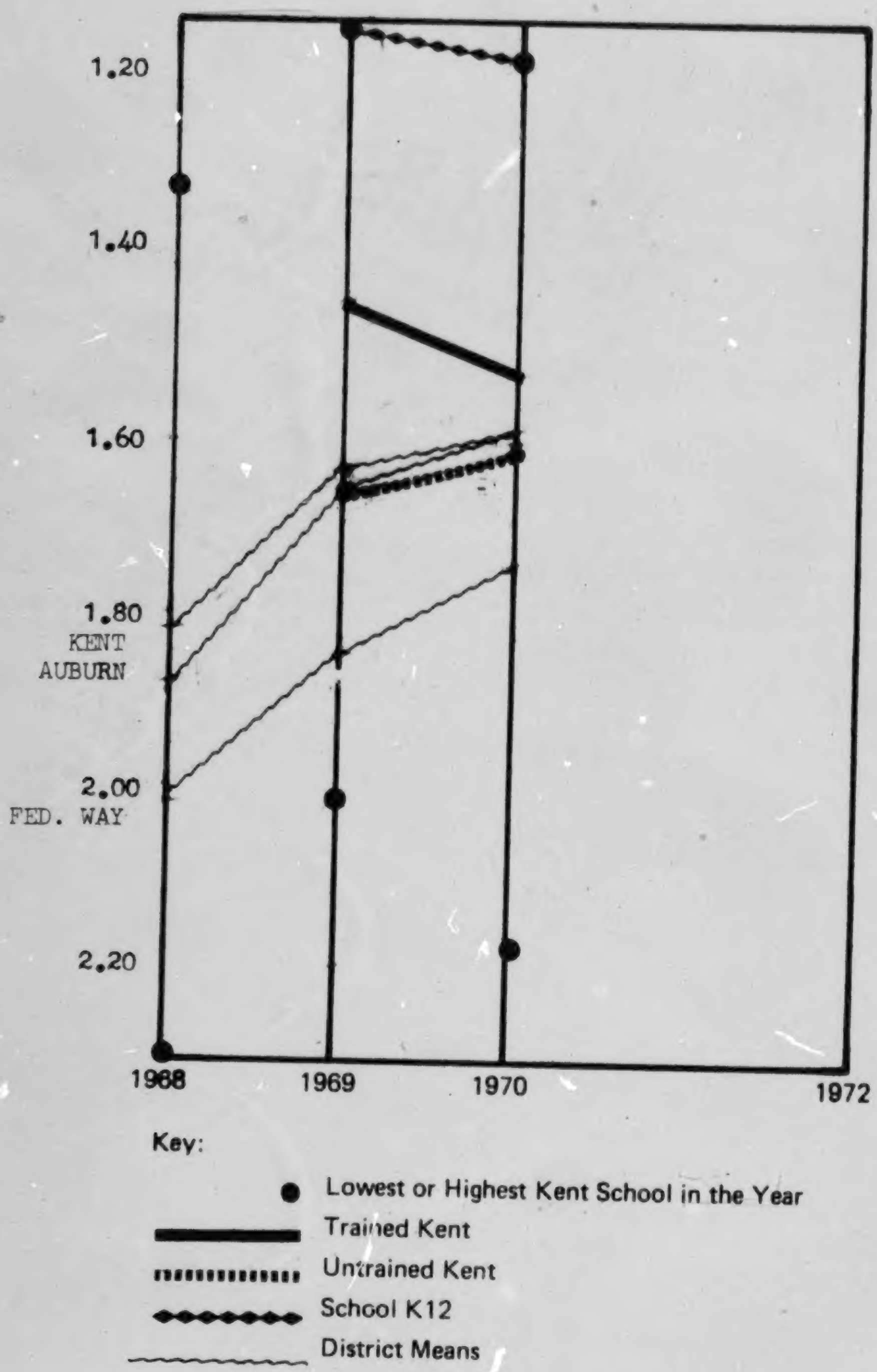
Districts

Kent	1.82	1.63	1.59
Auburn	1.88	1.65	1.60
Fed Wy	2.01	1.84	1.74

Item: Suppose Teacher X wants to improve his classroom effectiveness. If X asked another teacher to let him (X) observe the other teacher teach, how would you feel toward X?

( ) I would approve strongly. [1 Favorable]
( ) I would approve mildly or some. [2]
( ) I wouldn't care one way or the other. [3]
( ) I would dissaprove mildly or some [4]
( ) I would dissapprove strongly. [5 Unfavorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 17

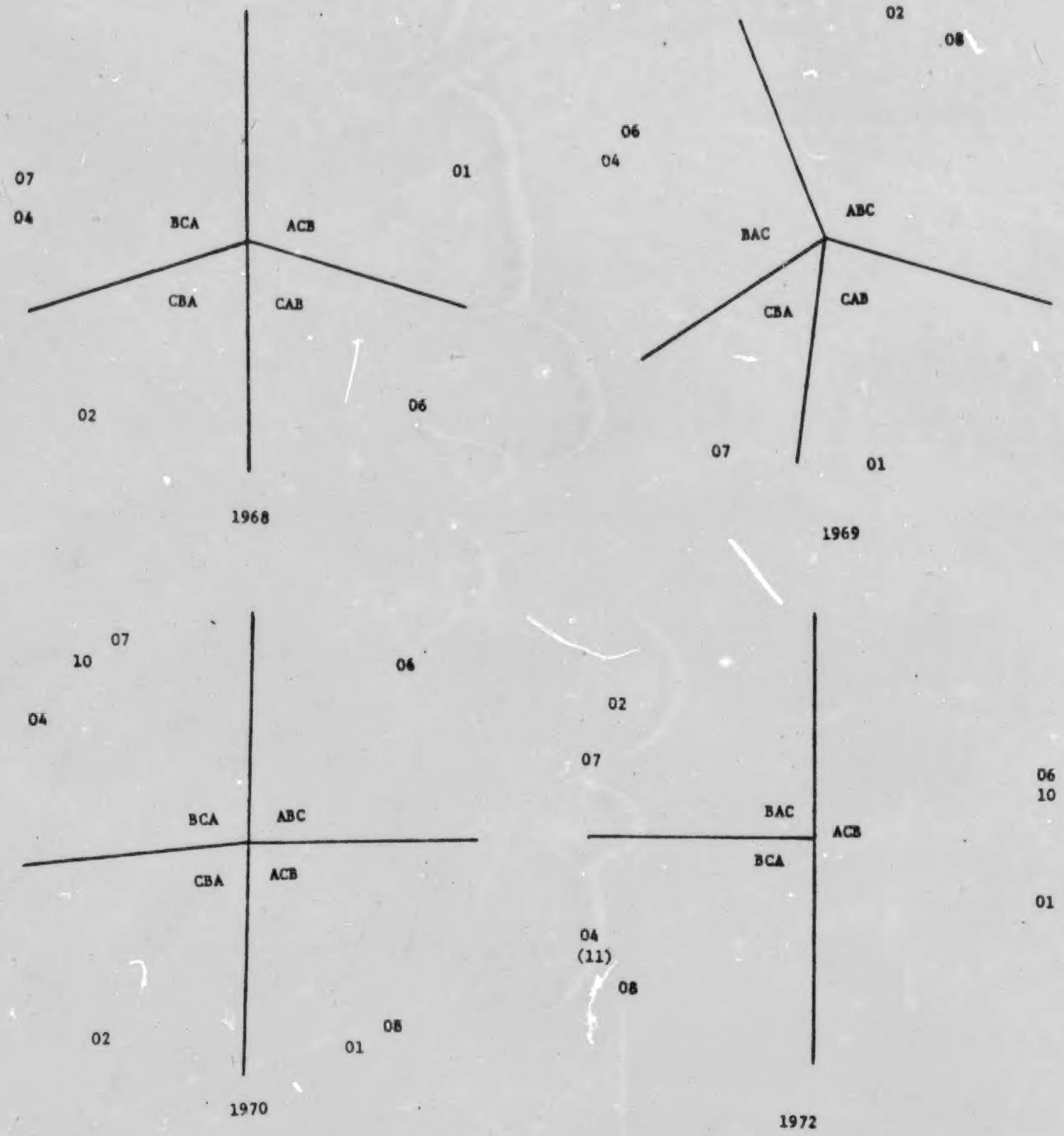


Appendix 5-F

Similarities among Auburn elementary schools in respect to standard scores on tests A, B, and C and also on D, E, and F

The question arises whether the clusters found among the elementary schools in Kent were unique to the Kent district. Our data from elementary schools in Federal Way suffered from missing schools from year to year, but we did have continuous data from Auburn, and we put those data into the MINISSA program. The results are shown on the accompanying plots. The schools clustered on the tests A, B, and C; no doubt about that. But it is impossible to declare whether they clustered as the schools in Kent did. In Auburn, there were only five schools in 1968 and eight in 1972. In 1968 and 1972, the schools did seem to separate into two clusters having the same characteristics as those in Kent. In 1969, however, there seemed to be three clusters, and in 1970, four. We performed no analysis of the score levels in Auburn, because there was only,one trained school; namely, school All in 1972.

Similar remarks fit the application of tests, D, E, and F to the Auburn elementary schools; see the accompanying plots.


07
04
BCA
ACB
01
CBA
CAB
02
06
02
08
06
04
ABC
BAC
CAB
CBA
07
01
07
10
06
04
BCA
ABC
CBA
ACB
02
01
08
02
07
06
10
BAC
ACB
BCA
01
04
(11)
08

1968

1969

1970

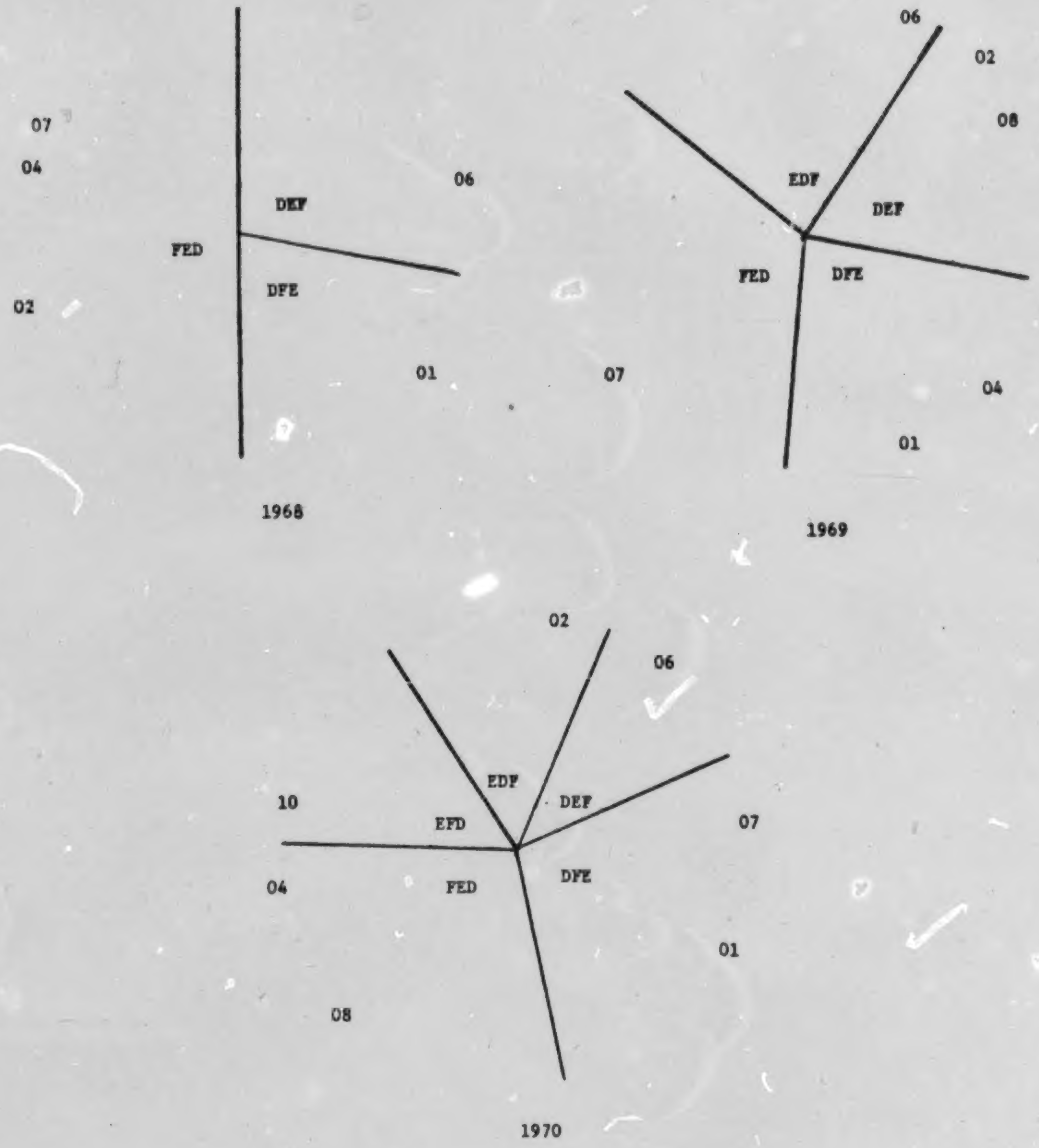
1972

Similarities amoung Auburn elementary schools in respect to

standard scores on tests A, B, and C.

ABC In each region, the first-listed letter tells the test on which the schools in that region scored highest, the second tells the test on which they scored next highest, and the third tells the test on which they scored lowest. For example, in 1972, school K01 scored highest on test A, nest on C, and lowest on B.

(11) A school whose number appears in parentheses received training or consultation at some time previous to the year shown.


07
04
FED
02
DEF
DFE
06
01
1968
06
02
08
EDF
DEF
FED
DFE
07
04
01
1969
02
06
EDF
DEF
10
EFD
07
04
FED
DFE
01
08
1970

Similarities amoung Auburn elementary schools in respect to standard scores on tests D, E, and F.

DEF In each region, the first-listed letter tells the test on which the schools in that region scored highest, the second tells the test on which they scored next highest, and the third tells the test on which they scored lowest. For example, in 1970, school K01 scored highest on test D, next on F, and lowest on E.

Appendix 5-G

Mean standard scores of elementary schools in Kent on Tests A, B, and C, arranged by year, cluster, and whether trained or untrained by that year

1968 untrained

	Cluster Ab				Cluster Ba		
	Tests				Tests		
School	A	B	C	School	A	B	C
K03	0.66	-1.51	-1.72	K01	-0.12	2.22	1.73
K05	0.90	0.08	0.33	K02	-0.85	0.18	-1.64
K06	-0.02	-0.28	0.20	K04	-2.51	-0.21	0.58
K07	0.11	-0.14	0.07	K08	0.71	1.00	0.83
K09	1.09	-0.07	0.01				
K10	0.02	-1.28	-0.39				
Mean	0.46	-0.53	-0.25		-0.69	0.80	0.38

1969 untrained

K07	0.27	-1.26	-0.78	K01	-1.70	-0.01	0.19
K08	-0.37	-1.12	-0.47	K02	-0.56	0.62	-1.79
K09	0.21	-0.63	0.41	K03	0.83	1.69	1.07
K10	0.01	-1.13	-1.34	K04	-0.47	1.59	-0.02
K12	2.30	0.69	1.91	K06	-1.06	-1.03	0.54
Mean	0.48	-0.69	-0.05		-0.59	0.57	-0.00

1969 trained

K11	1.00	0.22	0.79	K05	-0.45	0.37	-0.50

	Cluster Ab				Cluster Ba		
	Tests				Tests		
School	A	B	C	School	A	B	C
1970 untrained							
K01	-0.19	-1.88	-1.57	K03	-0.39	1.92	0.34
K02	-0.74	-1.16	0.02	K04	-0.44	0.92	0.11
K06	-0.06	-1.05	0.13	K07	-0.67	0.59	-0.31
K09	0.65	-0.71	0.64	K08	-0.97	-0.47	-0.71
				K10	-1.54	0.49	-0.41
Mean	-0.09	-1.20	-0.20		-0.80	0.69	-0.20
1970 trained							
K11	1.04	0.15	0.34	K05	-0.16	0.28	-0.30
K12	2.33	1.03	2.80				
K13	1.16	-0.12	-1.08				
Mean	1.51	0.35	0.69				
1972 untrained							
K03	0.31	-1.46	1.31	K01	-0.48	-0.33	-0.97
K07	1.02	-0.91	-0.98	K04	-1.82	1.94	0.79
K09	-0.48	-1.48	-0.56	K06	-0.56	0.84	0.39
K10	-0.68	-1.17	-0.69	K08	-1.40	-0.10	-0.25
Mean	0.04	-1.26	-0.23		-1.07	0.59	-0.01
1972 trained							
K02	0.91	0.17	0.81	K11	0.67	1.12	-0.27
K05	0.00	-0.35	-0.40	K13	-0.92	-0.24	-0.82
K12	1.91	0.60	2.57	K15	0.31	1.44	-1.22
K14	1.21	-0.05	0.28				
Mean	1.01	0.09	0.82		0.02	0.77	-0.77

Comments on ranges of means of trained and untrained schools within clusters Ab and Ba on tests A and B

The foregoing table shows means for groupings of trained and untrained schools within each cluster. Table 5-11 displayed the means on tests A and B, omitting those from 1968 because there were no trained schools in that year. We give further comment here on the patterns to be found among the means on tests A and B. We are speaking about eight categories, each category containing three means -- those of 1969, 1970, and 1972. These comments will be clearer if the reader refers to table 5-11 instead of the table above.

Complete separation of mean scores occurred between means on the higher test and the lower in both clusters, both among the trained schools and among the untrained.

Among trained schools, means on both tests (the higher test and the lower test) ran higher in cluster Ab than in cluster Ba -- in fact, there was no overlap in either case! But among untrained schools, the reverse order occurred between clusters: means on both tests in cluster Ab ran lower than in cluster Ba.

In cluster Ab, all means of trained schools on the higher test were higher than any mean of untrained schools on that same test. This was not true in cluster Ba. In both clusters, all means of trained schools on the lower test were higher than any mean of untrained schools on that test.

In cluster Ba, trained schools averaged about the same as untrained schools on their higher test (B); while on the lower test (A), trained schools did better than untrained, though both lay always in the negative except for the single insignificant case of the mean of 0.02 in 1972. In cluster Ab, in contrast, trained schools very much exceeded untrained schools on their higher test (A). Furthermore, while trained schools did better than untrained on their lower test (in this case, test B) -- as was also the case in cluster Ba -- the gap was larger in cluster Ab than in Ba, and none of the means of the trained schools in cluster Ab, even on the lower test, lay in the negative. Another way to say this is that from the trained schools, cluster Ab captured schools that scored generally higher than those in cluster Ba both on their higher and their lower tests; and from the untrained schools, cluster Ab captured schools that scored generally lower than those in cluster Ba, also both on their respectively higher and lower tests.

In sum, trained and untrained schools differed from each other much more on these two tests in cluster Ab than they did in cluster Ba. In cluster Ba, trained schools averaged about the same as untrained schools on the higher test; while on the lower test, trained schools did better than untrained, though both lay always in the negative except for the single insignificant case of the mean of 0.02 in 1972. In cluster Ab, in contrast, trained schools were very much higher than untrained on the higher test. Furthermore, while trained schools did better than untrained on the lower test as was also the case in cluster Ba, the gap was larger than in cluster Ba, and none of the means of the trained schools on the lower test lay in the negative. Another way to say this is that from the trained schools, cluster Ab captured schools that scored generally higher than those in cluster Ba both on their higher and their lower tests; and from the untrained schools, cluster Ab captured schools that scored generally lower than those in cluster Ba, also on both their higher and lower tests.

Schools highest and lowest on test C

The highest mean of any untrained school on test C in any year was K12's 1.91 in 1969. Two of the 13 means of trained schools exceeded that; namely K12 in 1970 with 2.80 and again in 1972 with 2.57.

The lowest mean among trained schools was the -1.22 of K15 in 1972. Three of the 27 intrained means fell below that: K10 in 1969 with -1.34, K01 in 1970 with -1.57, and K02 in 1969 with -1.79.

Appendix 5-H

Mean standard scores of elementary schools in Kent on tests D, E, and F

Table G-1. Mean standard scores of elementary schools in Kent on tests D, E, and F, arranged by year, cluster, and whether trained or untrained by that year

	Cluster 1				Cluster 2		
	Tests				Tests		
School	D	E	F	School	D	E	F
			1968 untrained				
K02	-0.44	-2.15	-0.44	K01	0.38	1.56	0.59
K04	0.11	-0.58	-0.61	K03	-0.60	0.73	-2.43
K08	0.18	0.11	1.31	K05	-1.23	-0.04	0.10
K09	-0.21	-0.58	1.11	K06	0.18	0.40	0.32
K10	2.60	1.12	0.26	K07	-0.96	-0.58	-0.21
Mean	0.45	-0.42	0.33		-0.45	0.41	-0.33
			1969 untrained				
K03	-0.02	-0.63	0.58	K01	-0.21	1.16	-0.65
K06	0.85	0.29	-0.30	K02	-0.34	-0.25	-1.38
K09	0.21	-2.31	0.94	K04	-0.63	0.73	0.01
K12	2.14	1.76	2.38	K07	-1.60	-0.63	-0.78
				K08	-1.37	-0.63	0.38
				K10	-0.02	0.40	-1.21
Mean	0.80	-0.22	0.90		-0.70	0.13	-0.60
			1969 trained				
K11	1.27	-0.25	0.50	K05	-0.28	0.35	-0.45

Table G-1 continued:

	Cluster 1				Cluster 2		
	Tests				Tests		
School	D	E	F	School	D	E	F
			1970 untrained				
K02	-0.36	-0.81	-0.54	K01	-1.32	-1.04	-0.69
K04	0.36	-0.62	0.29	K03	-1.27	0.30	0.57
K06	0.75	-0.16	0.05	K09	0.59	1.61	1.49
K07	-0.34	-0.43	-1.47				
K08	0.80	-1.54	-0.42				
K10	-0.22	-0.27	-1.03				
Mean	0.17	-0.64	-0.52		-0.67	0.29	0.46
			1970 trained				
K05	0.68	-0.66	0.72	K11	-0.29	0.53	0.11
K12	2.17	1.80	2.08	K13	-1.55	1.26	-1.16
Mean	1.43	0.57	1.40		-0.92	0.90	-0.53

Table G-2. Means of trained and untrained elementary schools in Kent on tests D and E within clusters De and Ed

	Cluster De	Cluster Ed
	Trained schools	
Higher test	(Test D) 1.43 in 1970 1.27 in 1969	(Test E) 0.90 in 1970 0.35 in 1969
Lower test	(Test E) 0.57 in 1970 -0.25 in 1969	(Test D) -0.28 in 1969 -0.92 in 1970
	Untrained schools	
Higher test	(Test D) 0.80 in 1969 0.17 in 1970	(Test E) 0.29 in 1970 0.13 in 1969
Lower test	(Test E) -0.22 in 1969 -0.64 in 1870	(Test D) -0.67 in 1970 -0.70 in 1969

Comments on ranges of means of trained and untrained schools within clusters De and Ed on tests D and E

The foregoing table shows means for groupings of trained and untrained schools within each cluster. We give further comment here on the patterns to be found among the means on tests D and E.

Complete separation of mean scores occurred between means on the higher test and the lower in both clusters, both among the trained schools and among the untrained.

Among trained schools, means on both tests (the higher test and the lower) ran higher in cluster De than in cluster Ed -- in fact, there was no overlap! Among untrained schools, the same pattern occurred, though not as strongly, this result among the untrained schools was the opposite of the result for tests A and B.

In cluster De, all means of trained schools on the higher test were higher than any mean of untrained schools on that same test. This was also true in cluster Ed, though not as strongly. In cluster De, means of trained schools on the lower test averaged considerably higher than means of untrained schools on that test; this was not true in cluster Ed.

In sum, trained and untrained schools differed from each other more on these two tests in cluster De than they did in cluster Ed. The lowest ranges (those on the lower test among untrained schools) did not differ remarkably between the clusters, but the upper ranges (those among trained schools) were considerably higher in cluster De than in cluster Ed. On both the higher test and the lower test, no trained school in cluster De scored as low as any trained school in cluster Ed.

Appendix 5-I

Means of trained and untrained elementary schools in Kent and of the elementary schools pooled in the Auburn and Federal Way districts on questionnaire items concerning the principal

Means of Responses of Teachers-and-others in Elementary Schools

to Item 5-I-1

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.82				
						4.78	K12			
					K06	4.40				
					K04	4.35				
						4.23	Mean			
						4.22	K05			
					K03	4.05				
						3.90	K11			
						3.88	K13			
					K01	3.84				
					K10	3.72				
					Mean	3.71				
					K07	3.14				
					K08	2.86				
					K02	2.54				

Districts

Kent	3.87
Auburn	3.87
Fed Wy	3.68

Item: To what extent does your principal engage in the following kinds of behavior?
Gives teachers the feeling that their work is an important activity?

( )	Never	[0 Unfavorable]
( )	Almost never	[1]
( )	Occasionally	[2]
( )	Frequently	[3]
( )	Almost always	[4]
( )	Always	[5 Favorable]
( )	I don't know	[6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools to Item 5-I-2

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.68				
						4.59	K12			
					K04	4.32				
					K06	4.26				
						4.03	K05			
						3.96	Mean			
					K03	3.89				
					Mean	3.66				
					K10	3.64				
					K01	3.58				
						3.57	K11			
						3.47	K13			
					K07	3.29				
					K08	3.04				
					K02	2.54				

Districts

Kent	3.75
Auburn	3.85
Fed Wy	3.60

Item: To what extent does your principal engage in the following kinds of behavior?

Gives teachers the feeling that they can make significant contributions to improving the classroom performance of their students.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools

to Item 5-I-3

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.45				
					K06	4.05	K12			
						4.00	K05			
						3.85	Mean			
						3.76	K13			
					K04	3.75				
					K03	3.63				
						3.45	K11			
					K10	3.40				
					Mean	3.25				
					K01	3.21				
					K02	2.41				
					K07	2.32				
					K08	2.24				

The difference between means is significant: $t=2.00$, $df=11$, $p<.10$.

Districts

Kent	3.44
Auburn	3.50
Fed Wy	3.17

Item: To what extent does you principal engage in the following kinds of behavior? Takes a strong interest in my professional development.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools to Item 5-I-4

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.18				
						3.64	K12			
					K06	3.55				
						3.23	K05			
						3.15	Mean			
						3.05	K11			
					K03	2.95				
					K04	2.84				
					Mean	2.62				
						2.50	K13			
					K08	2.35				
					K01	2.26				
					K02	2.07				
					K10	1.92				
					K07	1.78				

Districts

Kent	2.77
Auburn	3.22
Fed Wy	2.52

Item: To what extent does your principal engage in the following kinds of behavior? Makes teachers' meetings a valuable educational activity.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools

to Item 5-I-5

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	5.00				
						4.96	K12			
						4.67	K11			
					K04	4.62				
					K06	4.55	Mean			
						4.38	K05			
					K03	4.32				
						4.18	K13			
					K01	4.11				
					Mean	4.00				
					K10	3.84				
					K08	3.83				
					K07	3.22				
					K02	2.86				

Districts

Kent	4.17
Auburn	4.24
Fed Wy	4.01

Item: To what extent does your principal engage in the following kinds of behavior?
Treats teachers as professional workers.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools to Item 5-I-6

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.73				
						4.20	K11			
						4.19	K12			
						3.93	Mean			
						3.88	K05			
					K04	3.76				
					K03	3.74				
					K10	3.64				
					K06	3.45				
					Mean	3.43				
					K01	3.39				
						3.38	K13			
					K08	3.18				
					K07	2.61				
					K02	2.57				

Districts

Kent	3.58
Auburn	3.55
Fed Wy	3.22

Item: To what extent does your principal engage in the following kinds of behavior?
Helps teacher to understand the sources of important problems they are facing.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools to Item 5-I-7

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.95				
						4.77	K12			
						4.66	K05			
					K06	4.60	Mean			
					K04	4.54				
						4.47	K13			
					K10	4.44				
						4.43	K11			
					K03	4.26				
					Mean	4.18				
					K01	3.89				
					K07	3.67				
					K08	3.65				
					K02	3.64				

Districts

Kent	4.31
Auburn	4.22
Fed Wy	3.95

Item: To what extent does your principal engage in the following kinds of behavior? Displays a strong interest in improving the quality of the educational program?

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools

to Item 5-I-8

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	3.71				
					K06	3.70				
					K04	3.46				
						3.40	K05			
					K10	3.36				
					K01	3.33	K12			
					Mean	3.24				
					K03	3.21				
					K02	3.18				
						3.17	Mean			
					K08	3.00				
						2.94	K13			
						2.85	K11			
					K07	2.35				

Districts

Kent	3.22
Auburn	3.37
Fed Wy	3.12

Item: To what extent does your principal engage in the following kinds of behavior?

Brings to the attention of teachers educational literature that is of value to them in their jobs.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools to Item 5-I-9

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.68				
						4.25	K05			
						4.14	K12			
						3.97	Mean			
						3.86	K11			
					K04, 06	3.85				
					K01	3.47				
					K03	3.42				
					K10	3.40				
					Mean	3.37				
						3.35	K13			
					K08	2.86				
					K02	2.57				
					K07	2.43				

Districts

Kent	3.55
Auburn	3.59
Fed Wy	3.08

Item: To what extent does your principal engage in the following kinds of behavior?

Has constructive suggestions to offer teachers in dealing with their major problems.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools to Item 5-I-10

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
						4.83	K12			
						4.67	K11			
					K09	4.55				
					K06	4.53				
					K03	4.47				
					K01	4.32				
						4.22	Mean			
					K04	4.12				
						3.82	K13			
						3.68	K05			
					Mean	3.63				
					K10	3.61				
					K07	3.17				
					K08	2.86				
					K02	1.70				

Districts

Kent	3.81
Auburn	4.04
Fed Wy	3.76

Item: To what extent does your principal engage in the following kinds of behavior?

Puts you at ease when you talk to him.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools to Item 5-I-11

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K03	0.00				
						0.04	K12			
					K09	0.14				
					K04	0.32				
					K06	0.40				
						0.55	Mean			
						0.56	K13			
						0.57	K11			
					K01	0.61				
					Mean	0.92				
						0.93	K05			
					K10	1.05				
					K08	1.48				
					K07	1.57				
					K02	2.35				

Districts

Kent	0.80
Auburn	0.72
Fed Wy	0.72

Item: To what extent does your principal engage in the following kinds of behavior? Makes those who work with him feel inferior to him.

( )	Never	[0 Favorable]
( )	Almost never	[1]
( )	Occasionally	[2]
( )	Frequently	[3]
( )	Almost never	[4]
( )	Always	[5 Unfavorable]
( )	I don't know	[6 not tallied]

Means of Responses of Teachers-and-others in Elementary Schools to Item 5-I-12

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.90				
						4.78	K12			
					K04	4.20				
						4.15	Mean			
						4.14	K11			
					K03	4.11				
					K06	4.10				
						3.94	K05			
					K01	3.89				
						3.71	K13			
					Mean	3.49				
					K10	3.35				
					K08	3.00				
					K07	2.50				
					K02	1.81				

Districts

Kent	3.70
Auburn	3.95
Fed Wy	3.44

Item: To what extent does your principal engage in the following kinds of behavior? Develops a "we feeling" in working with others.

( ) Never [0 Unfavorable]
( ) Almost never [1]
( ) Occasionally [2]
( ) Frequently [3]
( ) Almost always [4]
( ) Always [5 Favorable]
( ) I don't know [6 not tallied]

Appendix 6-A

CLASSIFICATION OF SCHOOLS ON TWO INDEPENDENT VARIABLES

District	School	1970	1972
Kent	K01	UNTD-NONC	same
	K02	UNTD-NONC	TRND-NONC
	K03	UNTD-NONC	same
	K04	UNTD-NONC	same
	K05	TRND-COLL	same
	K06	UNTD-NONC	same
	K07	UNTD-NONC	same
	K08	UNTD-NONC	same
	K09	UNTD-NONC	same
	K10	UNTD-NONC	same
	K11	TRND-COLL	same
	K12	TRND-COLL	same
	K13	TRND-COLL	same
	K14	none	TRND-COLL
	K15	none	TRND-COLL
Auburn	A02	UNTD-NONC	same
	A04	UNTD-NONC	UNTD-COLL
	A06	UNTD-NONC	UNTD-COLL
	A07	UNTD-NONC	same
	A08	UNTD-NONC	same
	A10	UNTD-COLL	same
	A11	none	TRND-COLL
Federal Way	F03	UNTD-NONC	UNTD-COLL
	F04	UNTD-NONC	same
	F06	UNTD-NONC	same
	F11	UNTD-NONC	UNTD-COLL
	F12	UNTD-NONC	same
	F14	UNTD-COLL	same
	F15	UNTD-COLL	same
	F16	UNTD-COLL	same

Appendix 6-B

PROCEDURES FOR CONSTRUCTING TEST SCORES

A test score for each school for each test was constructed from individual raw scores by recoding the raw scores and converting them to standardized scores. The questionnaire items and the coding for response options used in this study are listed immediately below. The procedures used to construct test scores are then described.

Test Ia: Communication during emotion

Item 1. Suppose Teacher X feels hurt and "put down" by something another teacher has said to him. In Teacher X's place, would most of the teachers you know in your school be likely to tell the other teacher that they felt hurt and put down?

1	No; most would not do this
2	Maybe about half would
3	Yes, I think most would
Omit	I don't know

Item 4. Suppose Teacher X strongly disagrees with something B says at a staff meeting. In Teacher X's place, would most of the teachers you know in your school seek out B to discuss the disagreement?

1	No; most would not do this
2	Maybe about half would
3	Yes, I think most would
Omit	I don't know

Item 5. Suppose a teacher (let's call him or her Teacher X) is present when two others get into a hot argument about how the school is should be run. If teachers you know in your school were in Teacher X's place, what would most of them be likely to do? Would they try to help each one in the argument understand the viewpoint of the other?

Code	Response
1	No; most would not do this
2	Maybe about half would
3	Yes, I think most would
Omit	I don't know

The remaining 23 items on tests Ia, IIa, and IIIa all refer to meetings of staff members. In 1970, the individual's response could refer to a variety of kinds of meetings; during this year, however, the data of this study comes only from those individuals who named staff meetings (code 0 below). All others were assigned "missing data" values for each of the 23 items, and their responses were handled according to the procedures described later in this appendix. In 1972, the wording of the item was changed to refer only to staff meetings. The item -- in its 1970 wording -- was:

> The philosopher Martin Buber once said, "All life is meeting." No matter how that statement makes you feel, you will probably agree that school systems hold a lot of meetings, and that much depends on their quality. Please think specifically of some series of meetings: either meetings of the entire faculty of your building (*staff meetings*) or meetings in which only a part of the faculty meets (*committee meetings*). Name of the meeting you are considering: ______________________
>
> | | |
> |---|---|
> | 0 | Staff or faculty meeting |
> | 1 | Departmental meeting |
> | 2 | Grade level meeting |
> | 3 | Meeting of department heads |
> | 4 | Meeting of district personnel |
> | 5 | Committee meetings |
> | 6 | Team teachers |
> | 8 | Other |
>
> Now please consider what usually or typically happens in this meeting. For each of the items below, put one of the following numbers:
>
> | | |
> |---|---|
> | 5 | This is *very* typical of this meeting; it happens *repeatedly*. |
> | 4 | This is fairly typical of this meeting; it happens *quite often*. |
> | 3 | This is more typical than not, but it *doesn't happen a lot*. |
> | 2 | This is more untypical than typical, though it *does happen some*. |
> | 1 | This is quite untypical; it *rarely* happens. |
> | 0 | This is not typical at all; it *never* happens. |

Many of the 23 items were negatively worded; the codes that appear below for negatively-worded items have been reversed from the codes given just above.

Item 18. People are afraid to be openly critical or to make good objections.

5	not typical at all
4	quite untypical
3	more untypical than typical
2	more typical than not
1	fairly typical
0	very typical

Item 19. People hesitate to give their true feelings about problems which are discussed.

5	Not typical at all
to	
0	very typical

Item 20. People give their real feelings about what is happening during the meeting itself.

5	very typical
to	
0	not typical at all

Test IIa: Procedures in meetings

Item 21. Length of typical meeting

0	Typical meeting lasts 0-15 minutes
1	16-30 min. (or half-hour)
2	31-45 min. (or three-quarters of an hour)
3	46-60 min. (or one hour)
4	61-90 min. (or one hour)
5	91-120 min. (or two hours)
6	121-150 min. (or two and a half hours)
7	151-180 min. (or three hours)
8	More than 180 minutes (more than three hours)

Item 22. The group discusses the pros and cons of several different alternate solutions to a problem.

5	very typical
to	
0	not typical at all

Item 23. The same few people seem to do most of the talking during the meeting.

5 not typical at all
to
0 very typical

Item 24. There is a good deal of jumping from topic to topic -- it's often unclear where the group is on the agenda.

5 not typical at all
to
0 very typical

Item 25. The same problems seem to keep coming up over and over again from meeting to meeting.

5 very typical
to
0 not typical at all

Item 26. When the group is supposedly working on a problem, it is really working on some other "under the table" problem.

5 not typical at all
to
0 very typical

Item 27. There are splits or deadlocks between factions or subgroups.

5 not typical at all
to
0 very typical

Test IIIa: Effectiveness in meetings

Item 28. When problems come up in the meeting, they are thoroughly explored until everyone understands what the problem is.

5 very typical
to
0 not typical at all

Item 29. There is a tendency to propose answers without really having thought the problem and its causes through carefully.

5 not typical at all
to
0 very typical

Item 30. People bring up extraneous or irrelevant matters.

5 not typical at all
to
0 very typical

Item 31. Decisions are often left vague -- as to what they are, and who will carry them out.

5 not typical at all
to
0 very typical

Item 32. People do not take the time to really study or define the problem they are working on.

5 not typical at all
to
0 very typical

Item 33. When a decision is made, it is clear who should carry it out, and when.

5 very typical
to
0 not typical at all

Item 34. People don't seem to care about the meeting, or want to get involved in it.

5 not typical at all
to
0 very typical

Item 35. When the group is thinking about a problem, at least two or three different solutions are suggested.

5 very typical
to
0 not typical at all

Item 36. The results of the group's work are not worth the time it takes.

5 not typical at all
to
0 very typical

Item 37. People feel very committed to carrying out the solutions arrived at by the group.

5 very typical
to
0 not typical at all

Item 38. Solutions and decisions are in accord with the chairman's or leader's point of view, but not necessarily with the members'.

5	not typical at all
to	
0	very typical

Item 39. The discussion goes on and on without any decision being reached.

5	not typical at all
to	
0	very typical

Item 40. People feel satisfied or positive during the meeting.

5	very typical
to	
0	not typical at all

Test Ib: Variety

Item 41. Are there some people on the staff who come up with some really new and different ideas sometimes? About how many are there?

(Respondent writes in number)

Item 42. Are there others who generally seem to enjoy listening to these unusual ideas?

4	Many
3	Some
2	Only one or two
1	None

Item 43. Sometimes it is necessary for one teacher to tell another teacher something, or raise a question, that is embarrassing or otherwise not easy. Some people seem more able than others to open this kind of conversation in a spirit of helpfulness. Are there some people on the staff who very clearly have this special ability? About how many are there?

(Respondent writes in number)

Item 44. Are others in the school glad there is someone on the staff who can open up difficult conversations like this? About how many are glad, would you say?

4	Many
3	Some
2	Only one or two
1	None

Test IIb: Linkages

Item 7. Perhaps there are some people in your organization with whom you talk rather frequently about matters important to you. Please think of people with whom you talk seriously about things important to you, inside or outside formal meetings, once a week or more on the average. Write their names below. (If there are fewer than six people with whom you talk once a week about matters important to you, write down only as many as there are; if none, write "none." If there are more than six, list just the six with whom you feel your conversations are most satisfying.)

(Space is provided for the respondent to write six names, and the number of names entered is the respondent's score for the question.)

The following question was used to screen responses to item 45.

Item: This item concerns the choice of teaching methods you use in your classroom. Please mark "x" before the one statement below that best describes your part in deciding upon the teaching methods to be used in your classroom.

1 I choose my own teaching methods without assistance or direction.
2 The final choice of teaching methods is left to me, but there are others whose job includes making suggestions or recommendations.
3 Within certain limits I can choose my own teaching methods.
4 As a member of a group or committee, I share with others the job of deciding the teaching methods to be used.
5 I do not choose my own teaching methods. They are laid down for me by others.

Only those respondents who chose options 2, 3, 4, or 5 in the above item were counted in item 45. Those who chose option 1 in the item above were assigned "0" as a score on item 45; those who skipped the above item were assigned the school mean as a score on item 45.

Item 45. If you chose answer 2, 3, 4, or 5 in the question just above, you were indicating that at least some other person or persons were somehow involved in deciding upon the teaching methods to be used in your classroom. If you chose answer 2, 3, 4, or 5, please write below the names and positions of the other persons involved.

(Space is provided for the respondent to write four names in 1970, and eight names in 1972; the number of names entered is the respondent's score for the item.)

Item 46. In most schools, teachers have periodic meetings in some groups smaller than the entire faculty. These may be meetings of teachers of one grade, or of a unit, or of a department of some sort. Please name here the kind of small-group meeting that you attend regularly.

(Space provided to write in kind of meeting.)

How often are these meetings usually held?

4 Usually meets oftener than once a week
3 About once a week
2 Twice a month or oftener, but not once a week
1 Once a month or oftener, but not twice a month
0 Less than once a month

Item 47. Please think about how often you discuss with other members of the staff what the school ought to be trying to accomplish with its students. How often do you yourself discuss goals of this sort in FORMAL occasions (faculty meetings, committees, etc.)? Please make an "X" before the answer that comes closest to your case.

0 Never
1 Once or twice a year, maybe
2 About once a month, maybe
3 More than once a month but not once a week
4 About once a week
5 More than once a week

Item 48. Who are the persons, if any, whose jobs are so closely related to yours that you believe the two jobs must be performed collaboratively if either of you is to perform his work effectively. Please write names. If none, write "none."

(Space is provided for the respondent to write eight names; the number of names entered is the respondent's score for the item.)

Test IIIb: Knowledge and opinion about faculty matters

Item 49. Regardless of the official policy, who actually plans and develops the school curriculum? Please mark one or more choices below, regardless of whether your choices are the same as the previous question (which asked respondents to identify the body officially responsible for policy; the previous question was dropped in 1972, and the 1972 item reads, "Who actually plans and develops the school curriculum? Please mark one or more choices below.")

_____ I don't know who actually does this
_____ Citizens' or parents' committee
_____ Board of Education
_____ Superintendent
_____ Instructional supervisor
_____ Principal
_____ Department head or grade chairman
_____ A group of teachers
_____ The individual teacher
_____ Counselor(s) or guidance director
_____ School psychologist
_____ A student committee
_____ Other; specify ____________________

(If the respondent checked "I don't know..." he or she was assigned a score of "1" for the item; if the respondent checked any option other than one, he or she was assigned "9" as a score for the item; if the respondent skipped the item entirely, he or she was assigned the school mean as a score for the item.)

Item 50. Regardless of the official policy, who actually develops regulations for student conduct?

(The options, coding, and scoring of this item are identical to those in item 49.)

Item 51. Of the following items, which three do you consider most vital or important in your work as a teacher? Write the number "1" beside the most important, the number "2" beside the second most important, and the number "3" beside the third most important.

_____ Encouraging creativity among students
_____ Maintaining an orderly and quiet classroom
_____ Enriching the course of study or curriculum of the classroom
_____ Diagnosing learning problems of students
_____ Coordinating classroom activities with other parts of the school program
_____ Ensuring that students learn basic skills
_____ Solving personal problems of individual students
_____ Developing a student's ability in analytical reasoning and problem solving
_____ Developing the aesthetic potential of students
_____ Other(s). Please specify: _____________________
_____ I have no opinion

(Only responses to the fifth option, "Coordinating classroom activities with other parts of the school program," were counted, with the following coding:)

3 This option ranked first
2 This option ranked second, or this and other options merely checked
1 This option ranked third
0 This option unranked but others ranked

The following item was used to screen responses for item 52.

Item: Would you say there is some particular aspect of the school's functioning where new ideas are especially needed?

1 No, things are working about as well as they can
2 No, no particular aspect more than another. We just need things polished up a bit all over
3 Yes. If yes, please describe briefly the features of the school's functioning that need attention. (Space provided for two short descriptions)

(If the respondent chose "1" or "2" in the above question, he was assigned a score of "0" for item 52; if the respondent chose "3" above, the response to item 52 was scored according to the codes given below; if the respondent skipped the above item [response "9"] he was assigned a score of "9" on item 52.)

Item 52. If you wrote in an answer above, about how many people would you say agree with you about (the first write-in)?

3	Many
2	Some
1	Only one or two
0	None or "I don't know"

After this re-coding was done, the means and standard deviations of each district on each item were computed. Individual raw scores were then converted to standardized scores for each item by applying the following formula:

$$\text{Standardized score} = \frac{\text{raw score minus mean of district}}{\text{standard deviation of district}}$$

A data matrix was then constructed for each school on each test, with respondents as rows and items in columns, and the cells of the matrix filled with the respondents' standardized scores on each item. The school mean was computed for each item, and the school mean entered as the score for respondents who skipped an item or were otherwise counted as missing data. Within each school on each test, the standardized scores were then summed over respondents and items, and divided by number of respondents times number of items. The resulting number was the test score for that school for that test (27 schools x three tests = 81 test scores in 1970, and 30 schools x 6 tests = 180 test scores in 1972, or a grand total of 281 test scores).

A computer listing of raw test scores was then obtained by recoding each item as described above, summing individual raw scores over all individuals in each school over all items in each test, and dividing by the number of respondents times the number of items. The proportion of maximum possible score on each test was computed for each school according to the following procedure. The maximum possible score for each item in each test was summed (for example, Test Ia has three items with a maximum score of three each and three items with a maximum score of five each, so the maximum possible score is 9 + 15 = 24). Next, since the raw score for each school as described above is already divided by the number of items on each test, this figure must be reinstated in the numerator of the equation. The formula for determining the "proportion of maximum possible" score then, was:

$$\text{Proportion of maximum possible score} = \frac{(\text{raw test score})\ (\text{number of items})}{\text{Maximum possible score}}$$

For example, school 1 has a raw score of 2.41 on Test Ia(1970). Its proportion of maximum score was:

$$\text{Proportion of maximum possible score} = \frac{(2.41)(6\ \text{items})}{24} = .603$$

The maximum possible scores on each test were Ia = 24, IIa = 38, IIIa = 65.

Appendix 6-C

SCORES OF SCHOOLS ON TESTS Ia, IIa, AND IIIa (1970)
(Standard Scores)

District	School	Test		
		Ia	IIa	IIIa
Kent	K01	.01	-.12	-.30
	K02	-.76	-.14	-.62
	K03	.35	.15	.07
	K04	.06	.03	.04
	K05	.20	-.07	.38
	K06	.36	.25	.38
	K07	-.56	-.25	-.59
	K08	-.11	.13	.10
	K09	.53	.34	.80
	K10	-.27	.04	-.38
	K11	.05	-.18	.28
	K12	.51	-.01	.40
	K13	-.12	-.17	-.40
	Mean	.02	.00	.01
	S.D.	.39	.18	.44
Auburn	A02	-.14	-.24	-.27
	A04	-.27	-.05	-.25
	A06	-.18	-.12	-.33
	A07	-.14	-.09	.05
	A08	.13	.16	.21
	A10	.52	.34	.61
	Mean	-.01	.00	.00
	S.D.	.29	.21	.36
Federal Way	F03	-.15	.04	.27
	F04	-.28	.06	-.24
	F06	-.14	.00	.30
	F11	.08	-.18	.21
	F12	-.20	.00	.06
	F14	.19	-.31	-.89
	F15	.27	.43	.39
	F16	.46	.36	.45
	Mean	.03	.05	.07
	S.D.	.26	.25	.44

SCORES OF SCHOOLS ON TESTS Ia, IIa, AND IIIa (1972)
(Standard Scores)

District	School	Test Ia	Test IIa	Test IIIa
Kent	KO 1	-.14	-.45	-.47
	KO 2	-.20	-.17	-.16
	KO 3	.57	.34	.61
	KO 4	.36	.08	-.03
	KO 5	-.22	-.05	-.10
	KO 6	-.14	.09	.07
	KO 7	-.32	-.13	-.50
	KO 8	-.43	.03	-.37
	KO 9	.10	.18	.63
	K 10	-.19	.12	-.04
	K 11	.08	.10	-.03
	K 12	.73	.35	.81
	K 13	-.05	-.19	-.13
	K 14	-.02	.07	.41
	K 15	-.23	-.30	-.52
	Mean	-.01	.00	.01
	S.D.	.33	.22	.42
Auburn	A02	.11	.21	.40
	A04	.00	-.10	.17
	A06	.18	-.10	-.37
	A07	-.21	-.18	-.39
	A08	-.26	.10	.07
	A10	.21	.07	.16
	A11	.06	.01	.02
	Mean	.01	.00	.01
	S.D.	.18	.14	.29
Federal Way	F03	-.34	-.02	.03
	F04	.03	-.06	.26
	F06	-.10	.06	.15
	F11	.10	.06	.42
	F12	-.17	-.17	-.47
	F14	-.12	-.13	-.60
	F15	.46	.16	.00
	F16	.28	.17	.34
	Mean	.02	.01	.02
	S.D.	.26	.13	.37

SCORES OF SCHOOLS ON TESTS Ib, IIb, AND IIIb (1972)
(Standard Scores)

District	School	Test		
		Ib	IIb	IIIb
Kent	KO 1	-.28	-.29	.11
	KO 2	-.22	.10	.19
	KO 3	.13	-.28	-.05
	KO 4	.53	.17	-.14
	KO 5	-.26	-.16	-.04
	KO 6	-.04	-.42	-.08
	KO 7	-.11	-.20	.10
	KO 8	-.04	-.27	-.25
	KO 9	.11	-.23	.08
	K 10	-.15	-.14	-.08
	K 11	.14	.40	.21
	K 12	.51	.56	.10
	K 13	-.17	-.19	-.19
	K 14	.07	.25	.10
	K 15	-.46	.32	.00
	Mean	-.02	-.02	.00
	S.D.	.28	.30	.14
Auburn	A02	-.26	-.41	-.01
	A04	.38	-.28	-.01
	A06	-.28	.03	.07
	A07	.04	.07	-.01
	A08	.24	.03	.00
	A10	-.24	.22	.02
	A11	.04	.33	-.04
	Mean	-.01	.00	.00
	S.D.	.26	.26	.03
Federal Way	F03	.20	.44	.04
	F04	-.04	-.58	-.13
	F06	-.10	-.44	-.19
	F11	-.12	-.13	-.13
	F12	-.39	-.30	.15
	F14	-.12	.08	-.04
	F15	.31	.36	.32
	F16	.31	.27	-.01
	Mean	.01	-.04	.00
	S.D.	.25	.38	.17

Appendix 6-D

MEAN STANDARD SCORES OF ALL POOLS OF SCHOOLS ON ALL TESTS

Means of pools on "a" tests in 1970

	Ia	IIa	IIIa
TRND-COLL	.16	-.11	.17
UNTD-COLL	.36	.21	.14
UNTD-NONC	-.09	.00	-.03

Means of pools on "a" tests in 1972

	Ia	IIa	IIIa	
TRND-COLL	.05	-.01	.07	
TRND-NONC	-.20	-.17	-.16	(one school)
UNTD-COLL	.10	.01	.02	
UNTD-NONC	-.06	.02	-.01	

Means of pools on "b" tests in 1972

	Ib	IIb	IIIb	
TRND-COLL	-.02	.22	.02	
TRND-NONC	-.22	.10	.19	(one school)
UNTD-COLL	.06	.12	.03	
UNTD-NONC	-.01	-.24	-.04	

Appendix 6-E

Mean responses of elementary schools in Kent and mean responses of the Auburn and Federal Way districts to questionnaire items 18 through 40, items 45 and 47 in all years when administered

Means of Responses of Teachers-and-others in Elementary Schools

to Item 18

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K03	.82		K03	1.00	
					K09	1.18		K04	1.24	
					K06	1.35		K10	1.63	
					K08	1.48		K09	1.80	
					K04	1.64			1.81	K12
					K01	1.67			1.96	K11
						1.70	K11		2.11	K14
						1.76	K05		2.26	Mean
						1.82	K12		2.48	K13
						1.92	Mean	Mean	2.49	
					Mean	1.97		K06	2.55	
						2.56	K13		2.75	K05
					K10	2.63		K01	2.76	
					K07	3.09			2.79	K02
					K02	3.11			2.85	K15
								K08	3.63	
								K07	3.83	

Districts

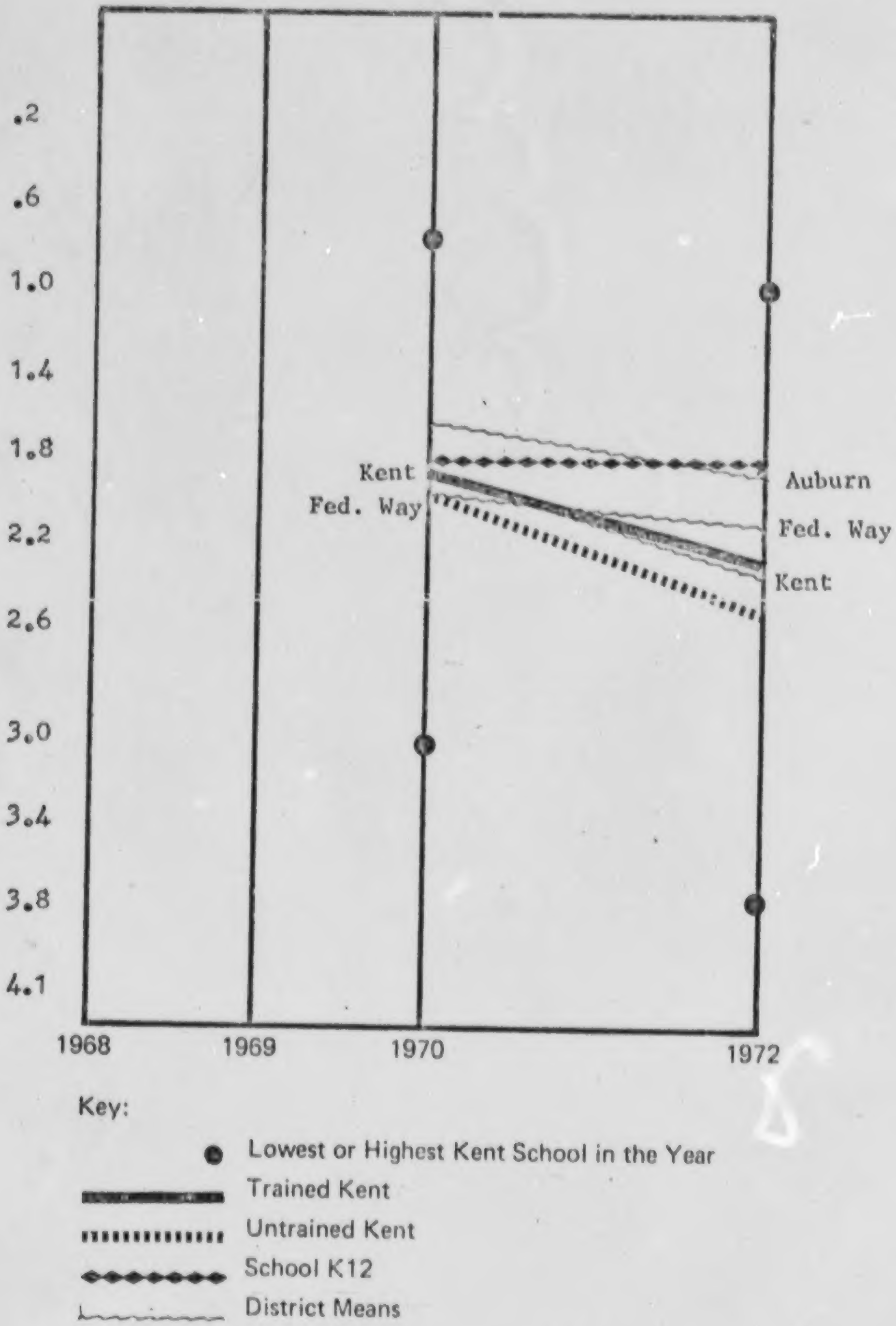
Kent	1.96	2.37
Auburn	1.61	1.94
Fed Wy	1.97	2.10

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

People are afraid to be openly critical or make good objections.

( )	This is very typical of the meeting; it happens repeatedly.	[5 Unfavorable]
( )	This if fairly typical of the meeting; it happens often.	[4]
( )	This is more typical than not; it happens sometimes.	[3]
( )	This is more untypical than typical; though it happens now and then.	[2]
( )	This is untypical; it rarely happens.	[1]
( )	This is not typical at all; it never happens.	[0 Favorable]

Means of Responses of Teachers and Others in Elementary Schools to Item 18



Means of Responses of Teachers-and-others in Elementary Schools to Item 19

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	1.59		K03	1.21	
					K06	1.85			1.45	K12
					K03	2.00		K04	1.90	
					K01	2.18		K09	2.13	
					K04	2.20	K05		2.79	K14
						2.23	K12	K10	2.88	
					K08	2.24		Mean	2.89	
						2.40	K11		2.96	K11, Mean
						2.47	Mean		3.00	K13
					Mean	2.57		K06	3.05	
						3.25	K13	K01	3.33	
					K10	3.40			3.50	K05
					K02	3.48			3.65	K15
									3.79	K02
								K08	3.95	
								K07	4.17	

Districts

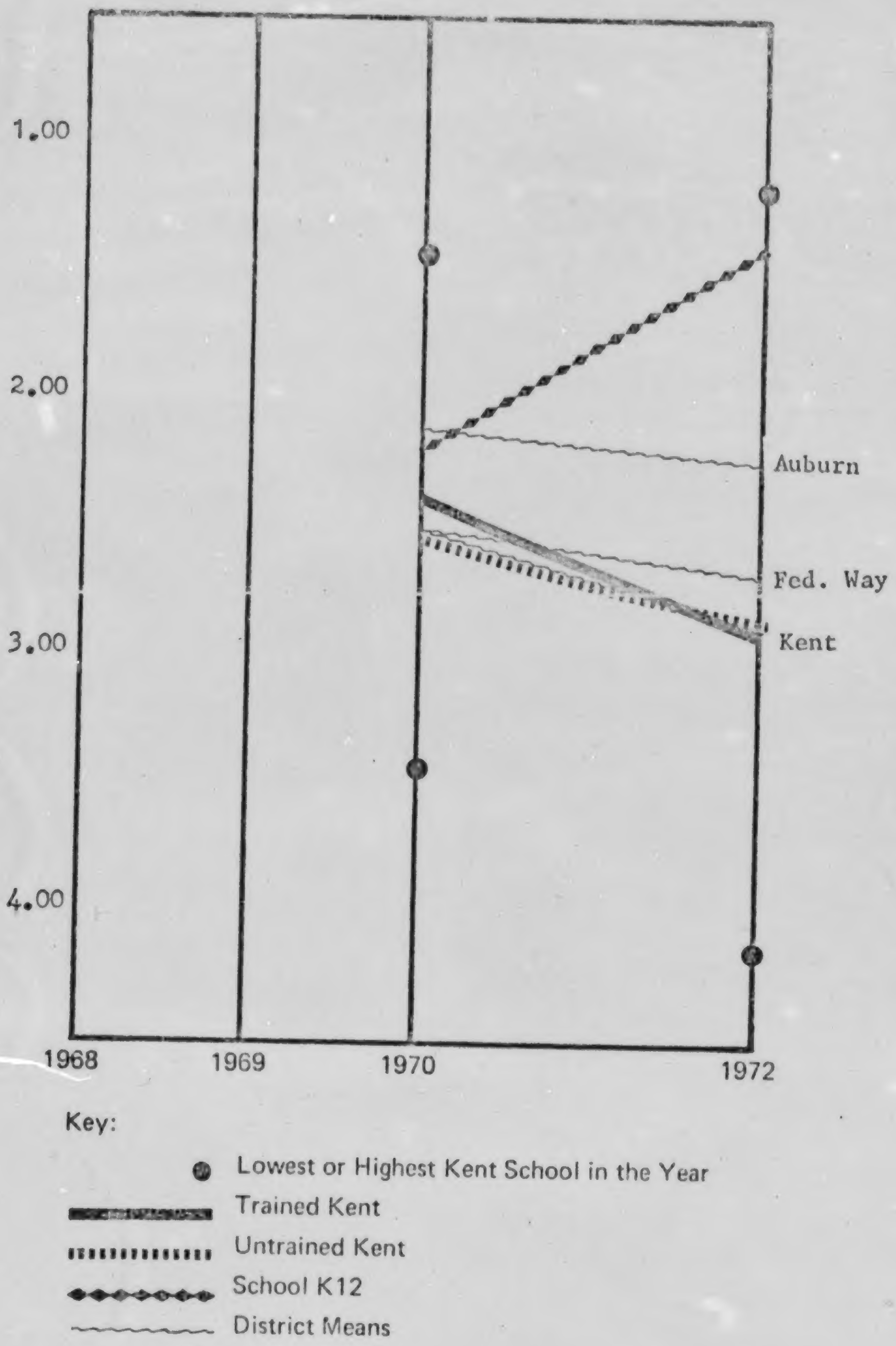
	1970	1972
Kent	2.54	2.92
Auburn	2.17	2.27
Fed Wy	2.56	2.73

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

People hesitate to give their true feelings about problems which are discussed.

( ) This is very typical of the meeting; it happens repeatedly. [5 Unfavorable]
( ) This is fairly typical of the meeting; it happens often. [4]
( ) This is more typical than not; it happens sometimes. [3]
( ) This is more untypical than typical; though it happens now and then. [2]
( ) This is untypical; it rarely happens. [1]
( ) This is not typical at all; it never happens. [0 Favorable]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 19



Means of Responses of Teachers-and-others in Elementary Schools to Item 20

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K06	3.84			3.95	K12
					K03	3.81		K03	3.67	
					K04, 09	3.73		K04	3.38	
						3.38	K11		2.84	K14
						3.37	K12		2.75	K11
						3.21	Mean		2.72	Mean
					K01	3.11		Mean	2.68	
						3.10	K05	K06	2.65	
					Mean	3.08		K01	2.57	
					K08	2.95			2.54	K13
						2.50	K13	K09	2.53	
					K07	2.39		K07	2.50	
					K10	2.33		K10	2.35	K15
					K02	2.23			2.17	K05
									2.14	K02
								K08	1.89	

Districts

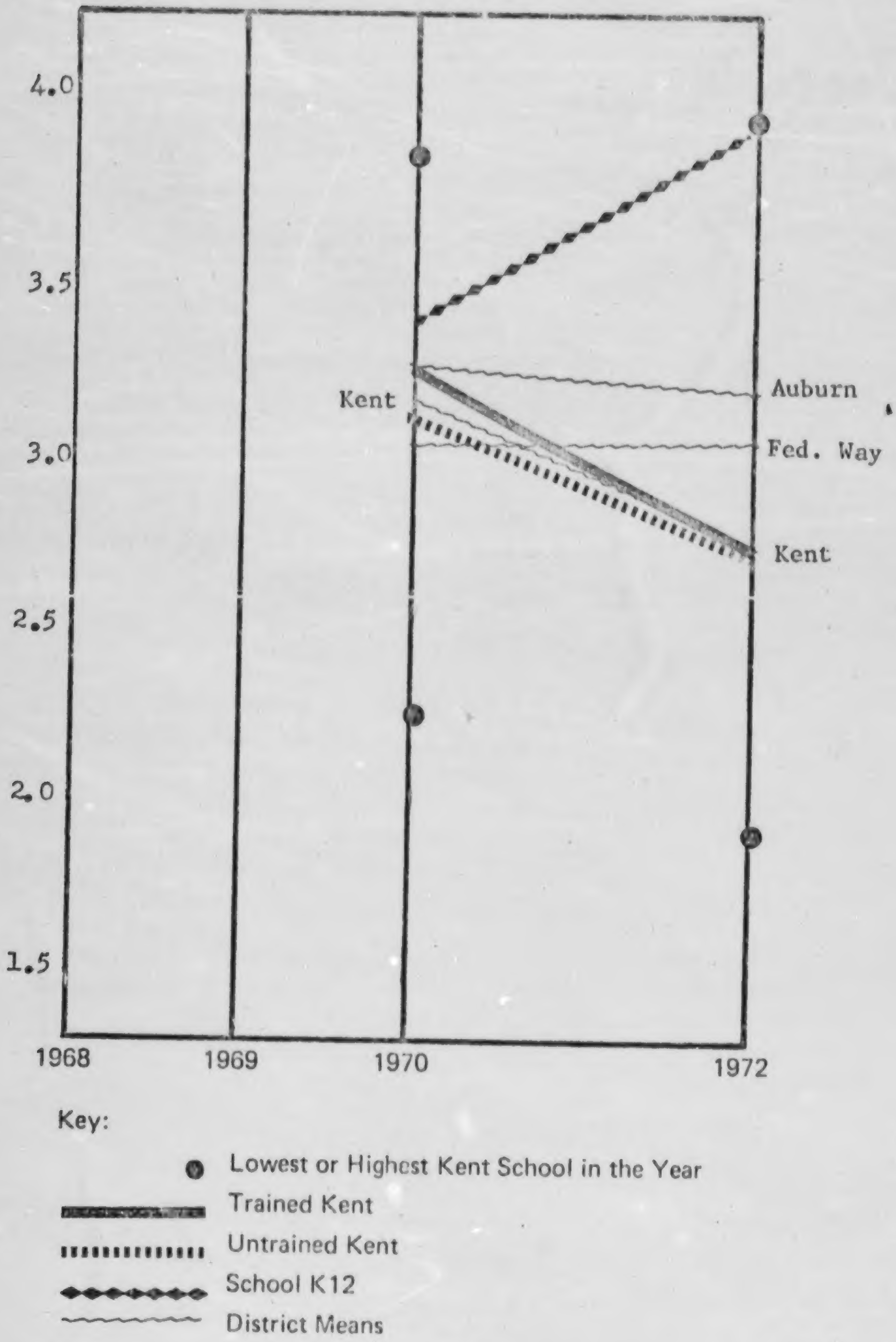
	1970	1972
Kent	3.11	2.70
Auburn	3.21	3.16
Fed Wy	3.00	3.03

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

People give their real feelings about what is happening during the meeting itself.

( ) This is *very* typical of the meeting; it happens repeatedly. [5 Favorable]
( ) This is fairly typical of the meeting; it happens *often*. [4]
( ) This is more typical than not; it happens *sometimes*. [3]
( ) This is more untypical than typical; though it happens *now and then*. [2]
( ) This is untypical; it *rarely* happens. [1]
( ) This is not typical at all; it *never* happens. [0 Unfavorable]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 20



Means of Responses of Teachers-and-others in Elementary Schools to Item 21

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
						84	K13		90	K11
					K01	83		K08	88	
					K10	81		K06	78	
					K02	77		K07	77	
					K06	76		K10	76	
					K07	75		K04	69	
					Mean	72			68	K02
					K04	69		Mean	67	
					K08	66			64	Mean
					K03	65			61	K15
						57	Mean		60	K05, 14
					K09	56		K03	58	
						52	K11		55	K13
						49	K05		52	K12
						44	K12	K09	50	
								K01	45	

Districts

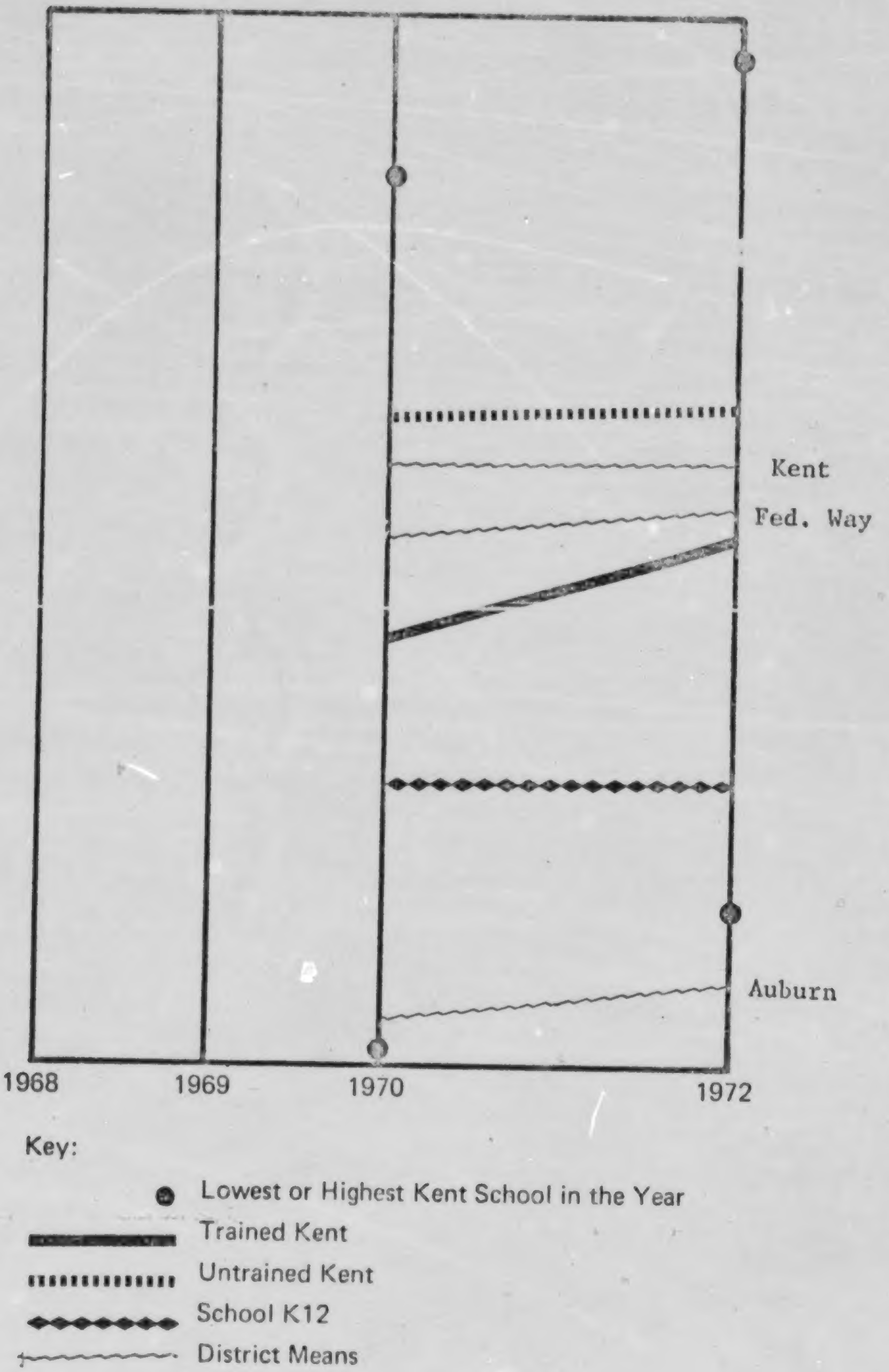
	1970	1972
Kent	68	66
Auburn	47	51
Fed Wy	62	63

Item: Please think specifically of the meetings of the faculty you have in your school. Length of typical meeting?

( ) Typical lasts 0-15 minutes.
( ) 16-30 min (or half-hour).
( ) 31-45 min (or three-quarters hour).
( ) 46-60 min (or one hour).
( ) 61-90 min (or hour and a quarter or and a half).
( ) 91-120 min (or two hours).
( ) 121-150 min (or two and a half hours).
( ) 151-180 min (or three hours).
( ) More than 180 minutes (more than three hours).

Scores consist of average length of typical faculty meeting.

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 21



Means of Responses of Teachers-and-others in Elementary Schools to Item 22

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
						4.32	K11		4.32	K12
					K09	4.29			4.11	K14
					K03	4.00	K12	K03	4.00	
					K10	3.92		K04	3.95	
						3.86	Mean	K09	3.87	
					K06	3.80			3.76	K11
					Mean	3.78			3.72	Mean
					K07	3.47		K10	3.65	
					K04	3.62			3.60	K05
						3.56	K13	K08	3.58	
						3.52	K11		3.55	K15
					K08	3.32		K06	3.50	
					K02	3.29		Mean	3.47	
					K01	3.16			3.36	K02
									3.29	K13
								K01	2.76	
								K07	2.61	

Districts

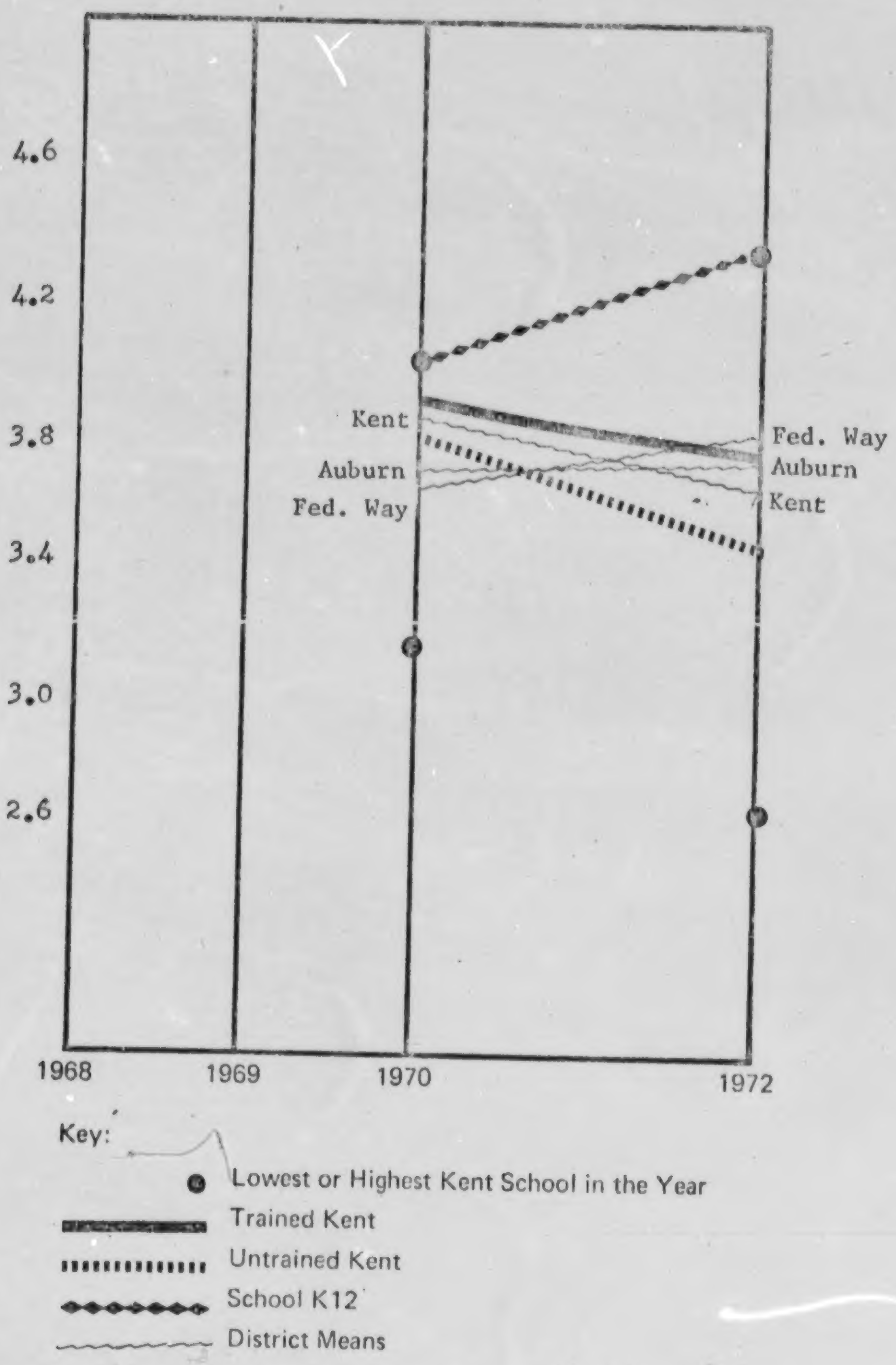
Kent	3.80	3.59
Auburn	3.68	3.71
Fed Wy	3.60	3.76

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

The group discusses the pros and cons of several different alternate solutions to a problem.

( ) This is very typical of the meeting; it happens repeatedly. [5 Favorable]
( ) This is fairly typical of the meeting; it happens often. [4]
( ) This is more typical than not; it happens sometimes. [3]
( ) This is more untypical than typical; though it happens now and then. [2]
( ) This is untypical; it rarely happens. [1]
( ) This is not typical at all; it never happens. [0 Unfavorable]

Means of Responses of Teachers and Others
in Elementary Schools
to Item 22



Means of Responses of Teachers-and-others in Elementary Schools to Item 23

Kent elementary schools

1968	
Untr schs	Mean score

1969		
Untr schs	Mean score	Trnd schs

1970		
Untr schs	Mean score	Trnd schs
K09	2.15	
K06	2.95	
K03	3.11	
	3.14	K12
	3.29	K11
K04	3.42	
K01	3.44	
	3.45	K05
Mean	3.54	Mean
K08	3.63	
K02	3.92	
K10	4.20	
K07	4.52	
	4.56	K13

1972		
Untr schs	Mean score	Trnd schs
	2.18	K12
K03	2.40	
K09	2.73	
K10	3.41	
Mean	3.55	
	3.59	Mean
	3.64	K11
K08	3.74	
K06	3.80	
K04	3.81	
	3.87	K13
	3.84	K05, 14
	3.93	K02
K07	3.94	
	4.00	K15
K01	4.10	

Districts

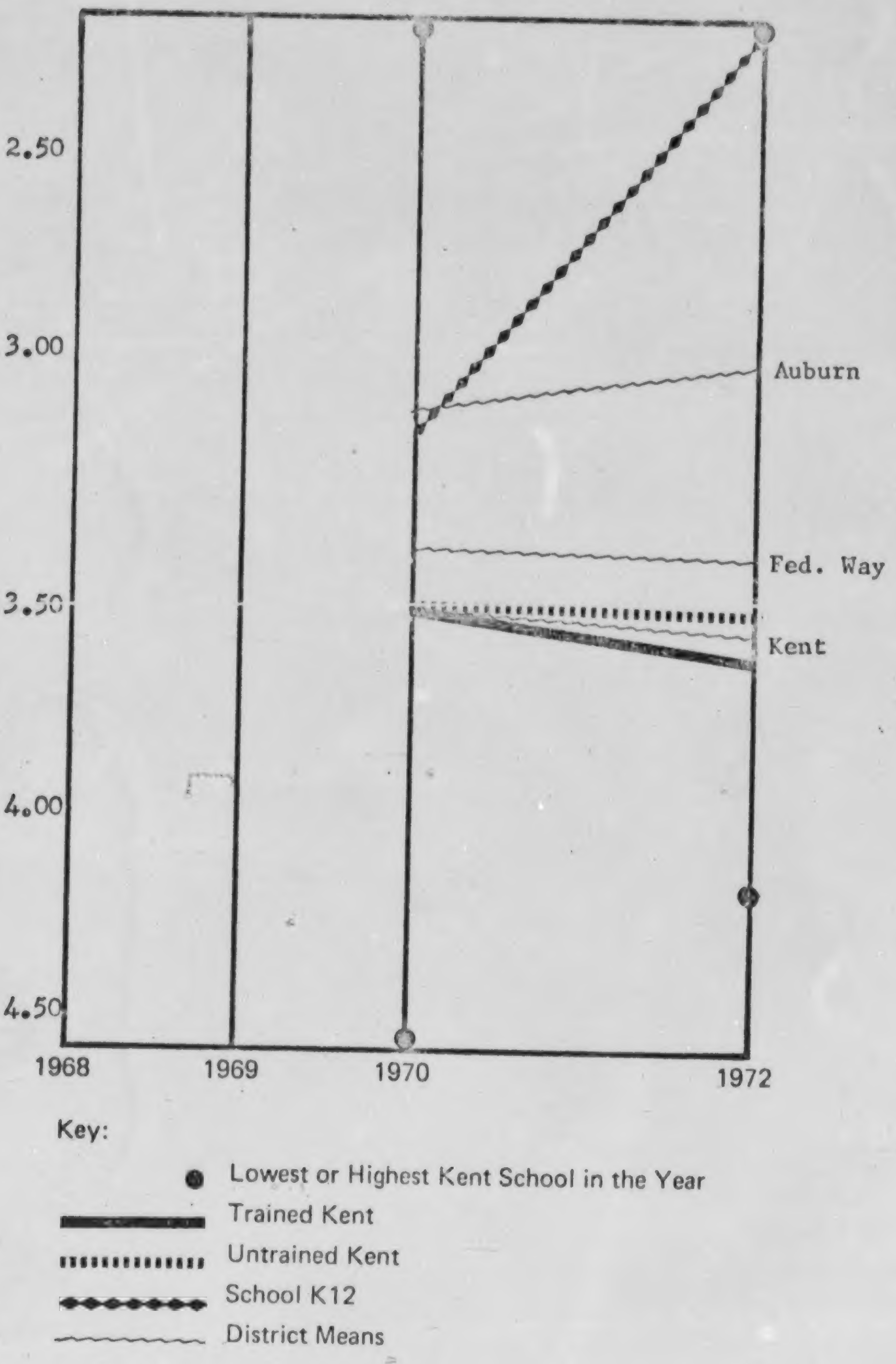
Kent	3.54	3.58
Auburn	3.08	2.94
Fed Wy	3.41	3.38

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

The same few people seem to do most of the talking during the meeting.

( ) This is very typical of the meeting; it happens repeatedly. [5 Unfavorable]
( ) This is fairly typical of the meeting; it happens often. [4]
( ) This is more typical than not; it happens sometimes. [3]
( ) This is more untypical than typical, though it happens now and then. [2]
( ) This is untypical; it rarely happens. [1]
( ) This is not typical at all; it never happens. [0 Favorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 23



Means of Responses of Teachers-and-others in Elementary Schools to Item 24

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	.76		K09	1.47	
					K06	1.42			1.50	K12
					K08	1.43		K03	1.60	
						1.52	K12		1.63	K14
					K02	1.65		K08	1.74	K05
						1.67	K11		1.93	K02
					K03	1.81		K06	1.95	
					Mean, K04	1.92			1.96	Mean
						1.94	Mean	K10	2.00	K11
						2.21	K05	Mean	2.01	
						2.50	K13	K07	2.17	
					K07	2.61			2.26	K13
					K01	2.78		K01	2.29	
					K10	2.79			2.60	K15
								K04	2.62	

Districts

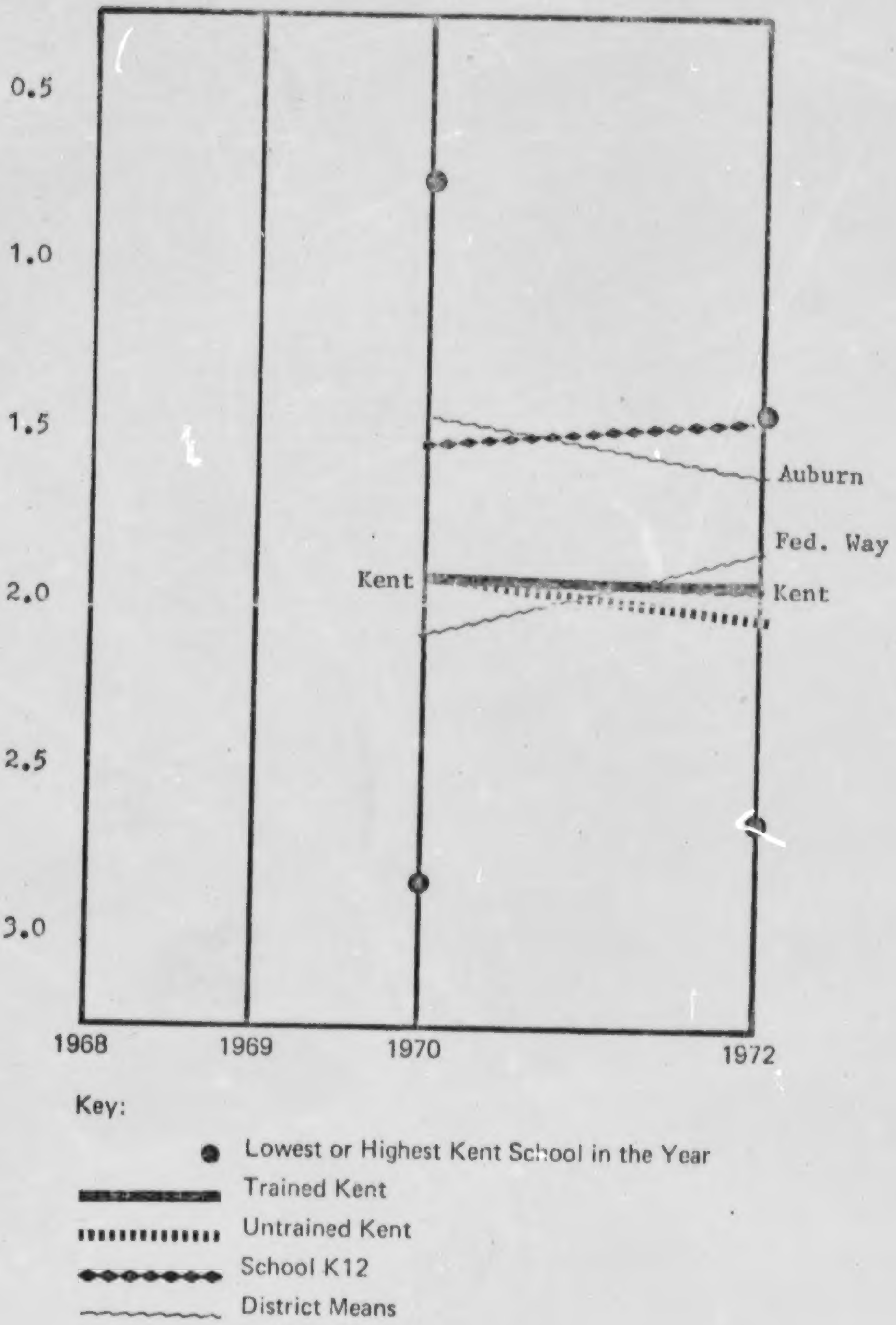
	1970	1972
Kent	1.92	1.99
Auburn	1.46	1.60
Fed Wy	2.07	1.83

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

There is a good deal of jumping from topic to topic -- it's often unclear where the group is on the agenda.

( )	This is very typical of the meeting; it happens repeatedly.	[5 Unfavorable]
( )	This is fairly typical of the meeting; it happens often.	[4]
( )	This is more typical than not; it happens sometimes.	[3]
( )	This is more untypical than typical, though it happens now and then.	[2]
( )	This is untypical; it rarely happens.	[1]
( )	This is not typical at all; it never happens.	[0 Favorable]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 24



Means of Responses of Teachers-and-others in Elementary Schools to Item 25

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	.95		K03, 09	1.60	
					K06	1.50			1.86	K12
						1.76	K11		2.04	K13
					K08	1.80			2.11	K05
						2.19	Mean	K10	2.12	
					Mean	2.28			2.16	K14
						2.29	K12		2.44	Mean
						2.32	K05	Mean	2.49	
						2.50	K13		2.50	K02
					K02	2.52		K04	2.52	
					K04	2.58			2.54	K11
					K03	2.63		K01	2.76	
					K07	2.65		K06	2.80	
					K01	2.79		K08	3.00	
					K10	2.88		K07	3.11	
									3.95	K15

Districts

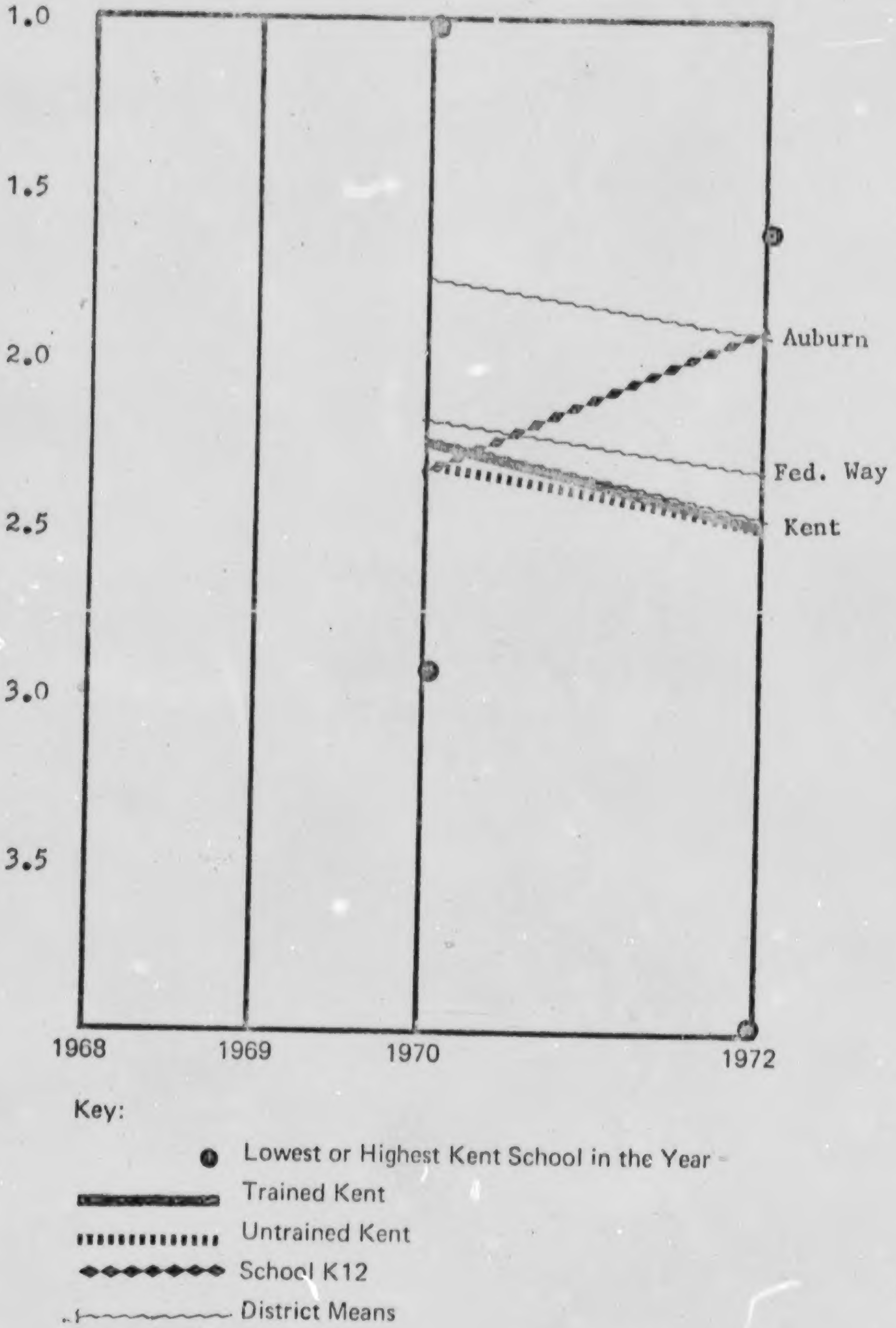
	1970	1972
Kent	2.24	2.47
Auburn	1.72	1.86
Fed Wy	2.17	2.28

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

The same problems seem to keep coming up over and over again from meeting to meeting.

( )	This is very typical of the meeting; it happens repeatedly.	[5 Unfavorable]
( )	This is fairly typical of the meeting; it happens often.	[4]
( )	This is more typical than not; it happens sometimes.	[3]
( )	This is more untypical than typical, though it happens now and then.	[2]
( )	This is untypical; it rarely happens.	[1]
( )	This is not typical at all; it never happens.	[0 Favorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 25



Means of Responses of Teachers-and-others in Elementary Schools to Item 26

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	.64			.81	K12
					K06	.67			1.50	K05
					K08	1.00		K04	1.55	
					K03	1.13			1.56	K14
					Mean	1.27			1.73	K13
					K04	1.35		K10	1.76	
					K12	1.37	K05	Mean	1.82	
					K01	1.53	Mean	K06	1.85	
						1.55	K11		1.88	Mean
					K10	1.57			1.92	K02
					K02	1.58			2.16	K11
					K07	1.74		K08	2.33	
						1.87	K13	K01	2.44	
								K07	2.62	
									3.47	K15

Districts

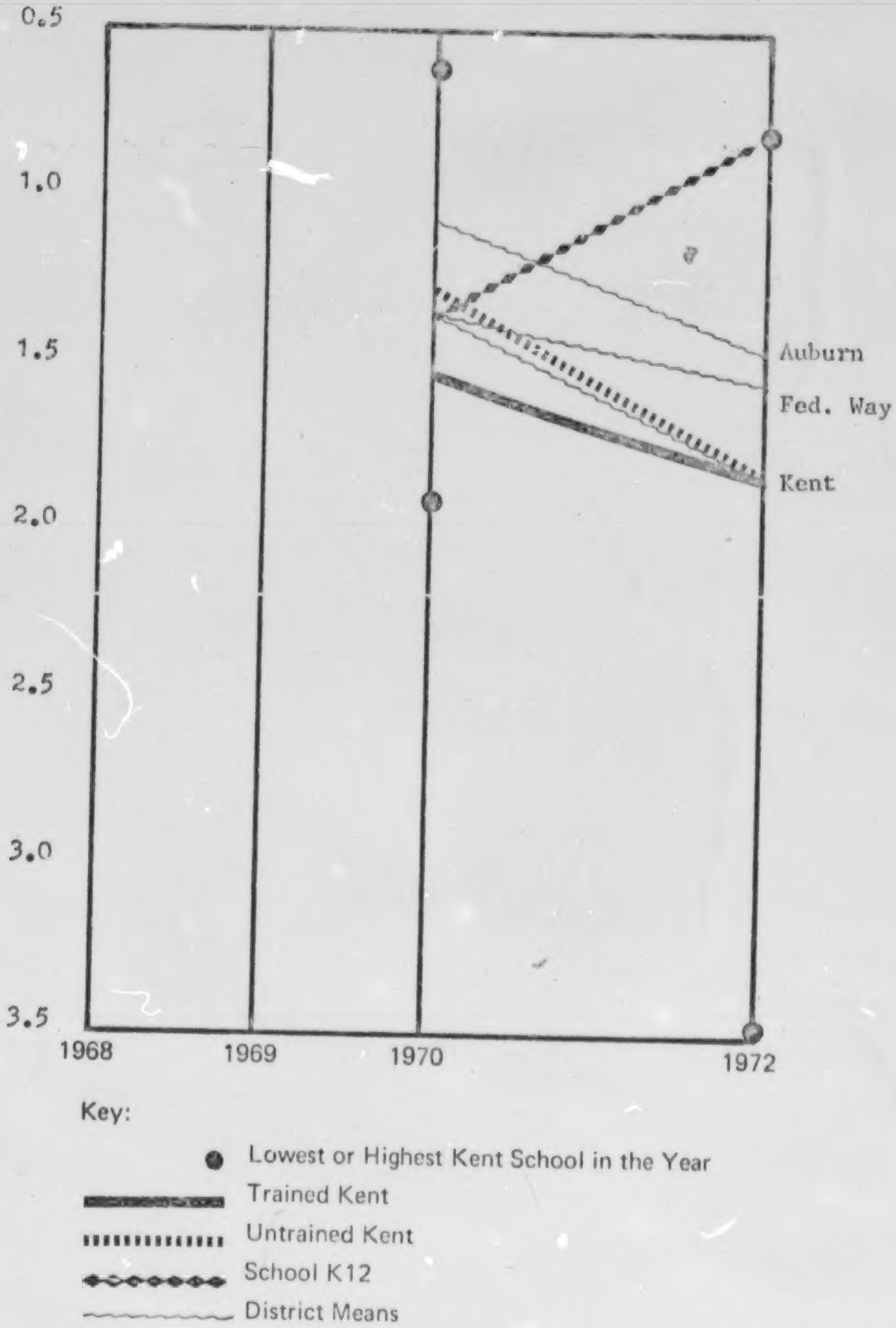
Kent	1.34	1.85
Auburn	1.07	1.46
Fed Wy	1.34	1.54

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

When the group is supposedly working on a problem, it is really working on some other "under the table" problem.

( ) This is very typical of the meeting; it happens repeatedly. [5 Unfavorable]
( ) This is fairly typical of the meeting; it happens often. [4]
( ) This is more typical than not; it happens sometimes. [3]
( ) This is more untypical than typical, though it happens now and then. [2]
( ) This is untypical; it rarely happens. [1]
( ) This is not typical at all; it never happens. [0 Favorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 26



Means of Responses of Teachers-and-others in Elementary Schools to Item 27

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	.86		K03	1.07	
					K03	1.37		K09	1.33	
						1.65	K12		1.59	K12
					K06	1.75		K04	1.71	
					K02	1.88		K10	1.82	
					Mean	1.94			1.87	K13
					K04, 10	2.05	Mean		2.05	K14
					K08	2.10	K11	K06, 07	2.30	
						2.25	K13	Mean	2.15	
						2.26	K05		2.48	Mean
					K01	2.29			2.53	K05
					K07	3.13			2.67	K11
								K01	2.75	
								K08	3.42	
									3.50	K02
									3.63	K15

Districts

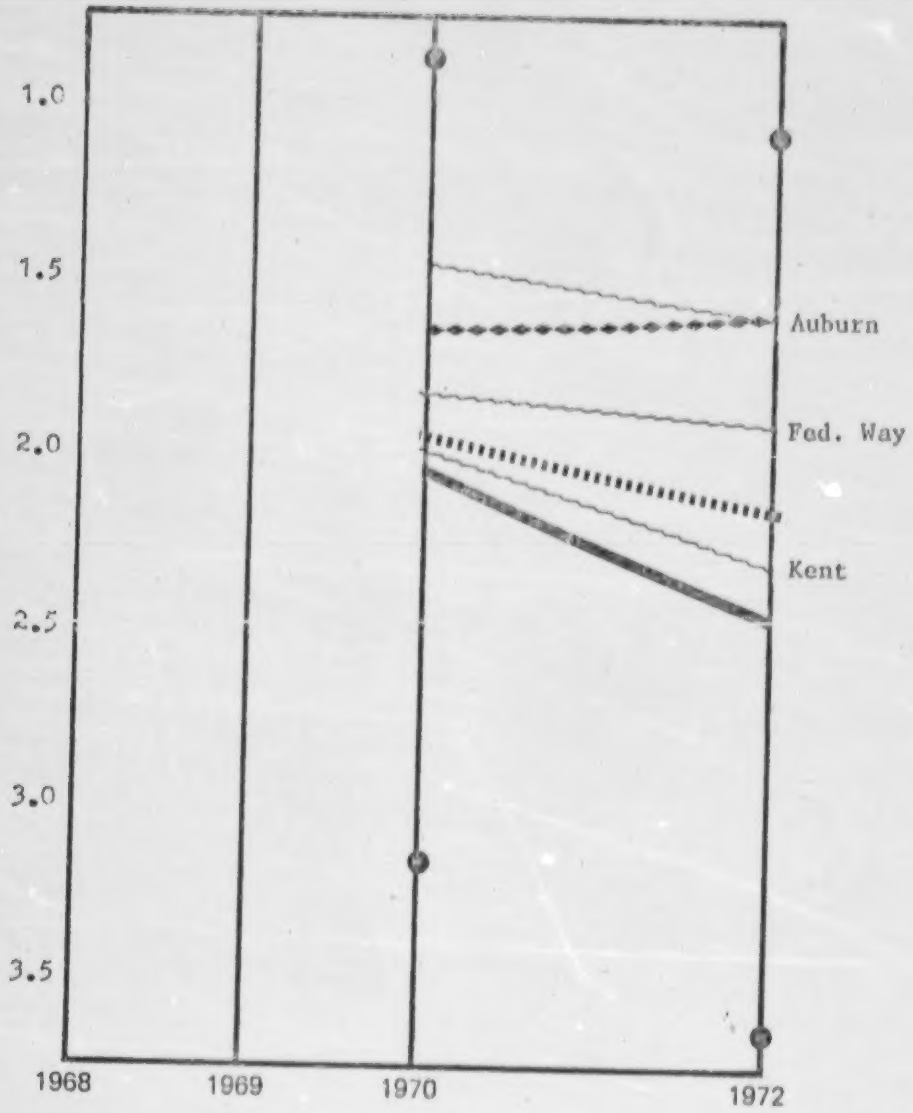
	1970	1972
Kent	1.97	2.31
Auburn	1.45	1.59
Fed Wy	1.80	1.89

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

There are splits or deadlocks between factions or subgroups.

( )	This is *very* typical of the meeting; it happens repeatedly.	[5 Unfavorable]
( )	This is fairly typical of the meeting; it happens *often*.	[4]
( )	This is more typical than not; it happens *sometimes*.	[3]
( )	This is more untypical than typical, though it happens *now and then*.	[2]
( )	This is untypical; it *rarely* happens.	[1]
( )	This is not typical at all; it *never* happens.	[0 Favorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 27



Key:

- ● Lowest or Highest Kent School in the Year
- ▬▬▬ Trained Kent
- ▮▮▮▮▮▮▮ Untrained Kent
- ◆◆◆◆◆◆ School K12
- ～～～ District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 28

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.14			4.27	K12
					K04	3.77	K05		3.95	K14
					K08, 03	3.76		K03	3.87	
						3.66	K11	K09	3.73	
					K06	3.65			3.65	K05
					Mean	3.56			3.56	K11
						3.54	Mean, K12	K06	3.55	
					K01	3.53			3.49	Mean
					K10	3.50		K04	3.43	
					K07	3.13		Mean	3.21	
						3.06	K13	K10	3.18	
					K02	3.03			3.05	K15
									2.93	K02
									2.87	K13
								K01	2.61	
								K07	2.39	

Districts

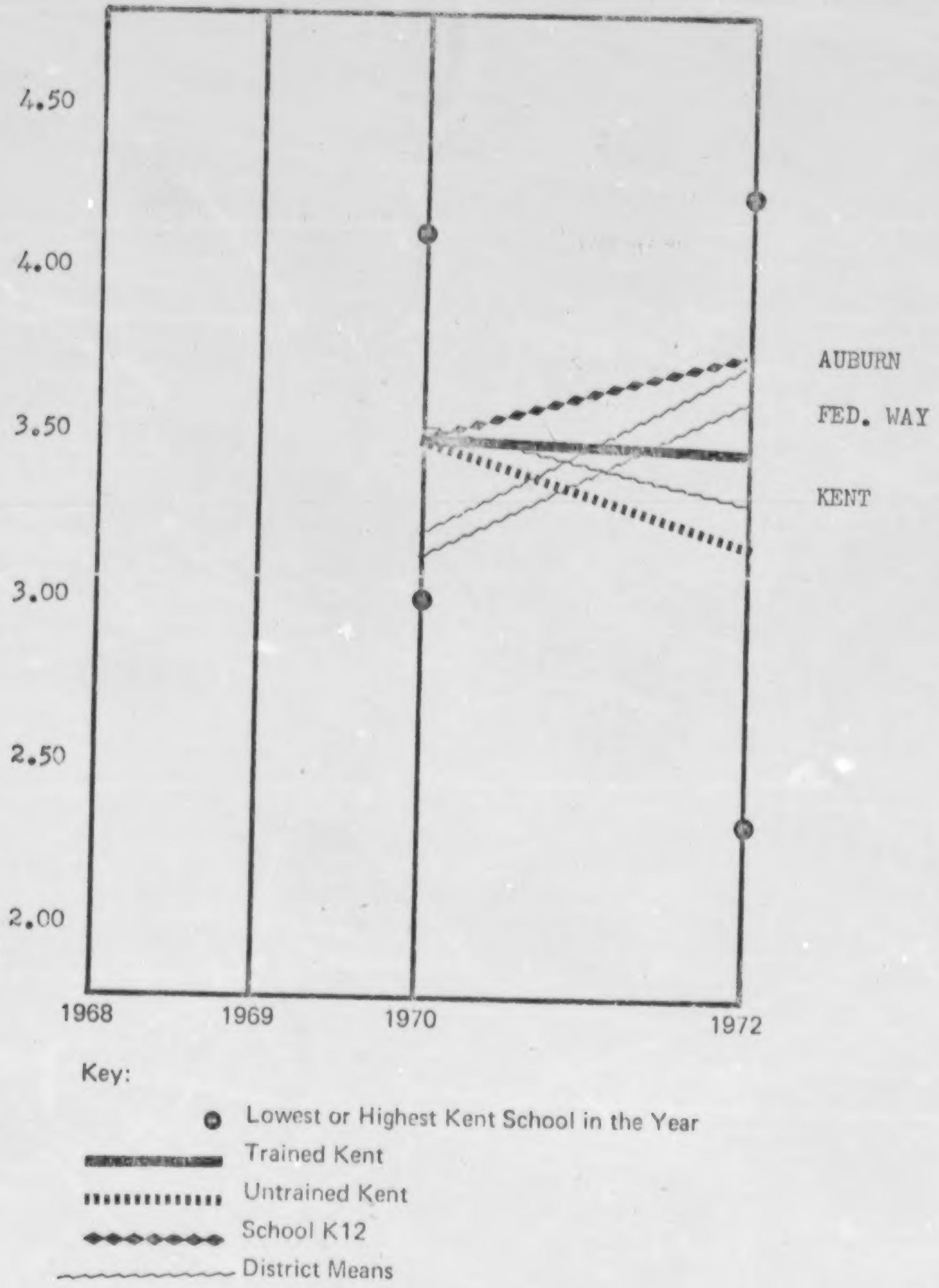
	1970	1972
Kent	3.56	3.35
Auburn	3.23	3.75
Fed Wy	3.19	3.65

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

When problems come up in the meeting, they are thoroughly explored until everyone understands what the problem is.

( ) This is very typical of the meeting; it happens repeatedly. [5 Favorable]
( ) This is fairly typical of the meeting; it happens often. [4]
( ) This is more typical than not; it happens sometimes. [3]
( ) This is more untypical than typical, though it happens now and then. [2]
( ) This is untypical; it rarely happens. [1]
( ) This is not typical at all; it never happens. [0 Unfavorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item: 28



Means of Responses of Teachers-and-others in Elementary Schools

to Item 29

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K06	1.57		K03	1.80	
					K09	1.68			1.82	K12
					K08	1.86		K09	1.87	
						2.00	K11		2.05	K14
						2.05	K12	K06	2.15	
					K03	2.17		K08	2.32	
						2.23	Mean		2.48	Mean
						2.30	K05		2.50	K02
					Mean	2.31		Mean	2.54	
					K04	2.38			2.60	K11
					K10	2.54		K04	2.62	
					K01,02	2.63			2.65	K13
						2.69	K13		2.75	K05
					K07	3.04			3.00	K15
								K01	3.10	
								K10	3.12	

Districts

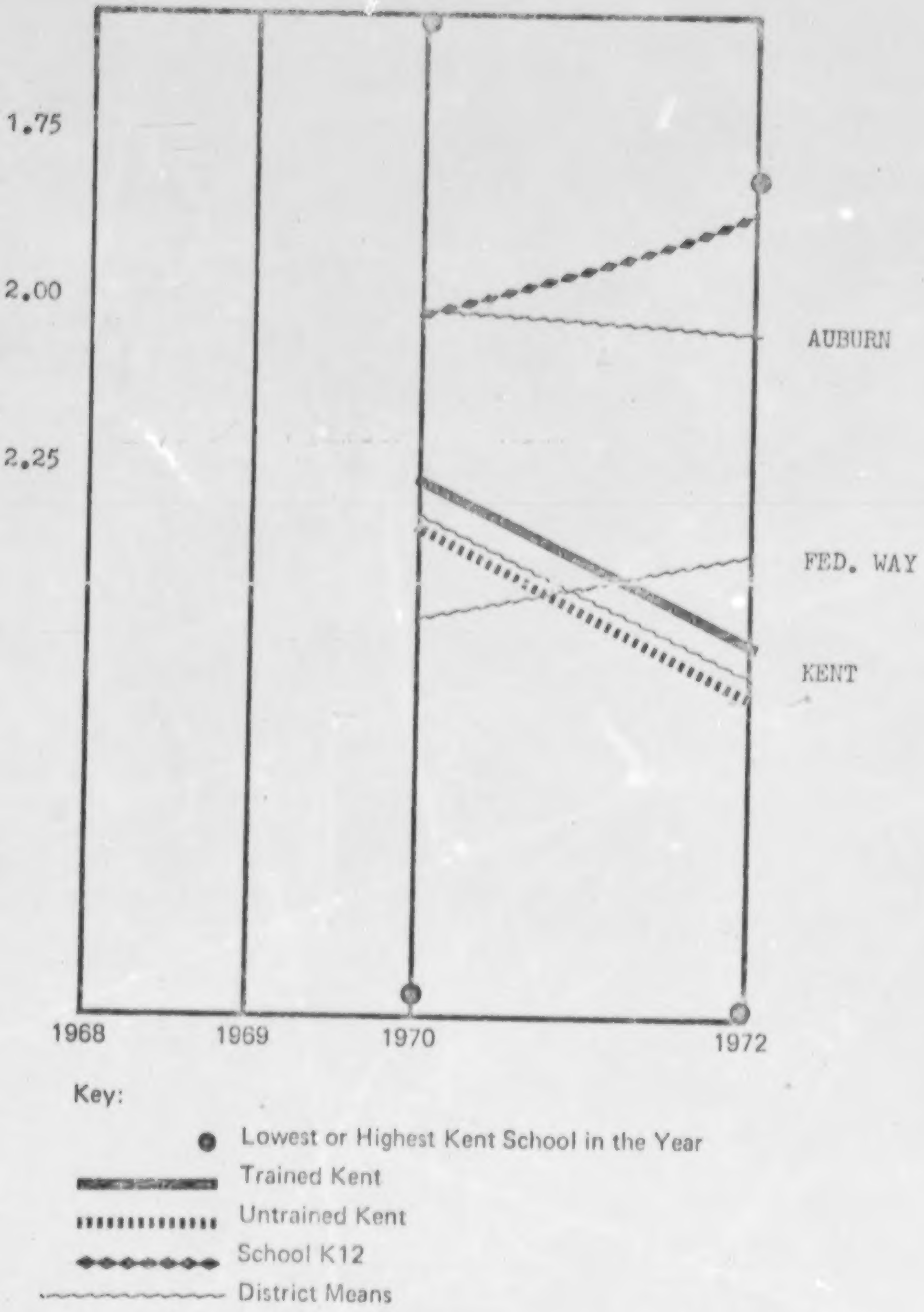
	1970	1972
Kent	2.29	2.52
Auburn	2.00	2.07
Fed Wy	2.46	2.34

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

There is a tendency to propose answers without really having thought the problem and its causes through carefully.

( ) This is very typical of the meeting; it happens repeatedly. [5 Unfavorable]
( ) This is fairly typical of the meeting; it happens often. [4]
( ) This is more typical than not; it happens sometimes. [3]
( ) This is more untypical than typical, though it happens now and then. [2]
( ) This is untypical; it rarely happens. [1]
( ) This is not typical at all; it never happens. [0 Favorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item: 29



Means of Responses of Teachers-and-others in Elementary Schools

to Item 30

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	1.41		K09	1.73	
					K08	1.81			1.82	K12
						2.19	K11	K03	2.00	
						2.41	K12		2.37	K14
					K06	2.63		K06, 10	2.65	
					K04	2.65		Mean	2.90	
					K02	2.74			3.00	K02
					Mean	2.82			3.03	Mean
						2.84	Mean		3.09	K13
					K03	2.94		K07	3.17	
					K01	3.21			3.20	K11
						3.31	K13	K01	3.40	
						3.57	K05	K03	3.43	
					K07	3.83			3.60	K05
					K10	4.00		K08	3.63	
									4.15	K14

Districts

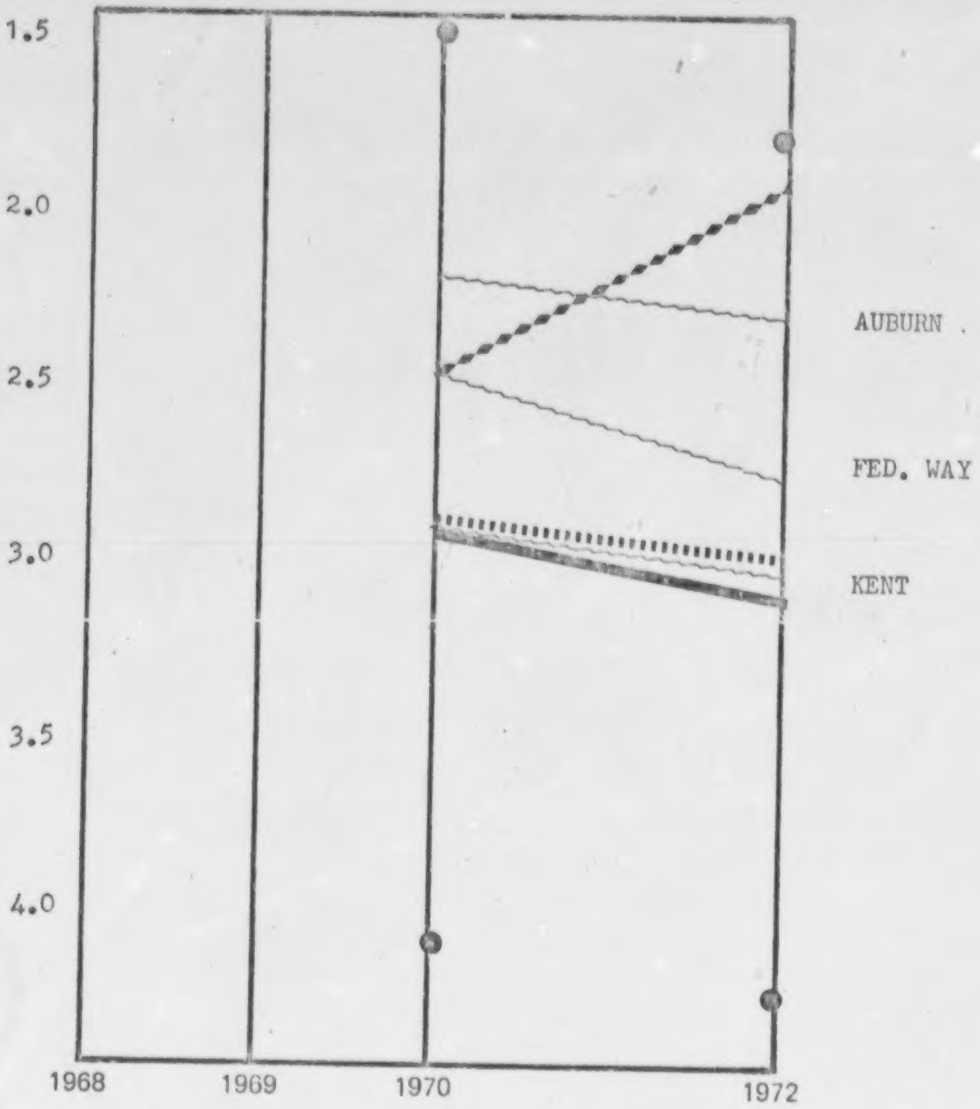
	1970	1972
Kent	2.82	2.96
Auburn	2.13	2.25
Fed Wy	2.38	2.70

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

People bring up extraneous or irrelevant matters.

( )	This is very typical of the meeting; it happens repeatedly.	[5 Unfavorable]
( )	This is fairly typical of the meeting; it happens often.	[4]
( )	This is more typical than not; it happens sometimes.	[3]
( )	This is more untypical than typical, though it happens now and then.	[2]
( )	This is untypical; it rarely happens.	[1]
( )	This is not typical at all; it never happens.	[0 Favorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item: 30



Key:

- ● Lowest or Highest Kent School in the Year
- ▬ Trained Kent
- ▪▪▪▪▪▪▪▪▪▪▪▪▪ Untrained Kent
- ◆◆◆◆◆◆◆ School K12
- ～～～～ District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 31

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	.95		K09	1.27	K12
					K06	1.32		K03	1.57	
						1.81	K11	K06	1.95	
					K03	1.88			2.36	K02
						2.05	K12		2.37	K14
						2.26	Mean		2.39	K13
					K04	2.36		Mean	2.44	
					Mean	2.42		K08	2.47	
						2.48	K05		2.54	Mean
					K08	2.62		K04	2.57	
					K01	2.79			2.63	K05
						2.88	K13	K10	2.76	
					K02	2.93			2.88	K11
					K07	2.96		K01	3.10	
					K10	3.54		K07	3.39	
									3.90	K15

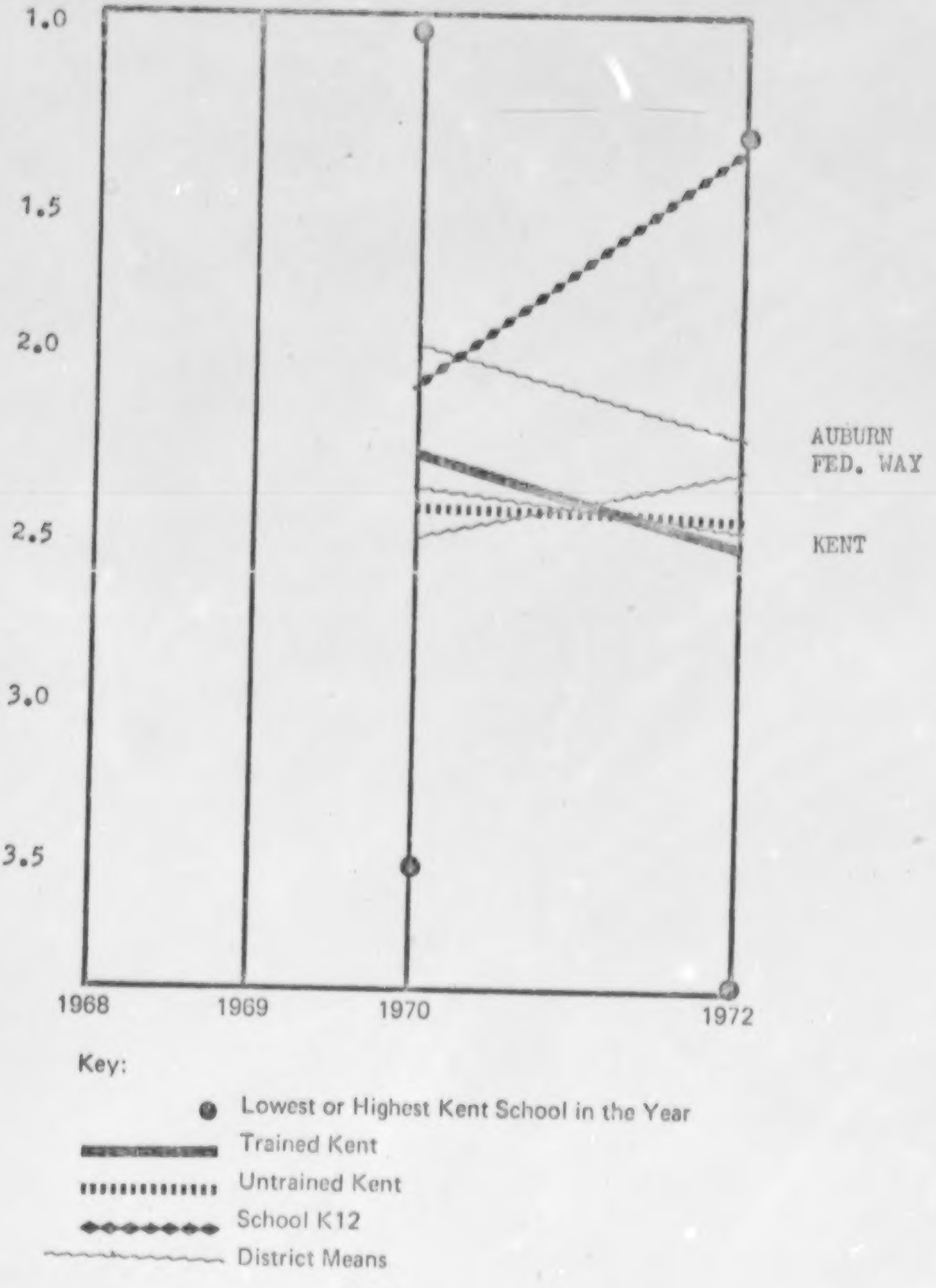
Districts

Districts	1970	1972
Kent	2.38	2.49
Auburn	1.92	2.19
Fed Wy	2.52	2.30

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

- ( ) This is very typical of the meeting; it happens repeatedly. [5 Unfavorable]
- ( ) This is fairly typical of the meeting; it happens often. [4]
- ( ) This is more typical than not; it happens sometimes. [3]
- ( ) This is more untypical than typical, though it happens now and then. [2]
- ( ) This is untypical; it rarely happens. [1]
- ( ) This is not typical at all; it never happens. [0 Favorable]

Means of Responses of Teachers and Others in Elementary Schools to Item: 31



Means of Responses of Teachers-and-others in Elementary Schools to Item 32

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	1.29			1.36	K12
					K08	1.85		K09	1.47	
					K03	1.88		K03	1.53	
						2.00	K05		2.11	K14
					K06	2.11			2.34	Mean
						2.14	K12	Mean, K10	2.47	
						2.24	K11	K04	2.48	
						2.32	Mean		2.50	K02, 05
					Mean	2.36		K06	2.55	
					K04	2.38			2.56	K11
					K01	2.53			2.70	K13, 15
					K02	2.67		K01	2.80	
					K10	2.92		K07	2.94	
						3.06	K13	K08	3.11	
					K07	3.29				

Districts

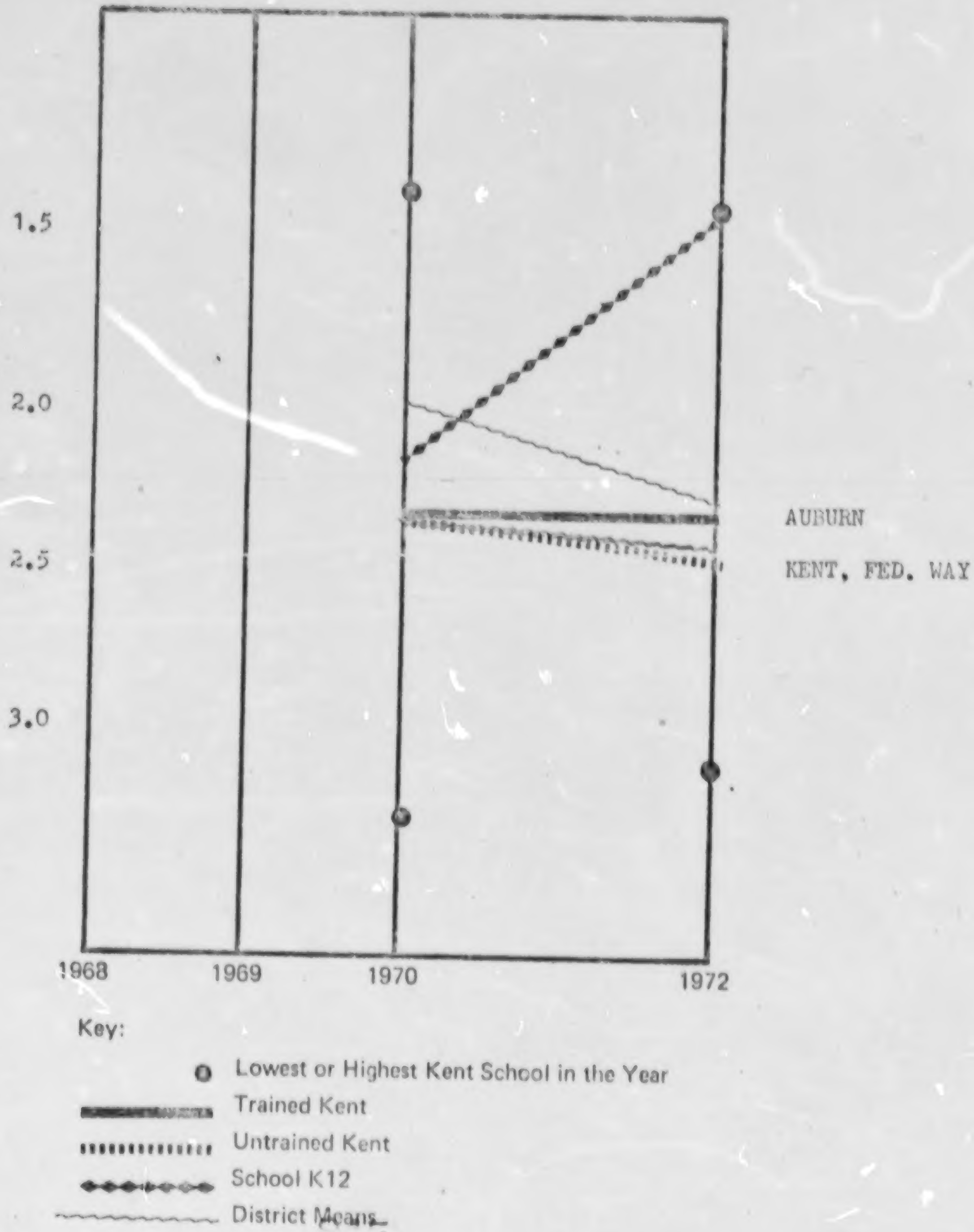
Kent	2.35	2.41
Auburn	1.98	2.32
Fed Wy	2.34	2.46

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

People do not take the time to really study or define the problem they are working on.

( )	This is very typical of the meeting; it happens repeatedly.	[5 Unfavorable]
( )	This is fairly typical of the meeting; it happens often.	[4]
( )	This is more typical than not; it happens sometimes.	[3]
( )	This is more untypical than typical, though it happens now and then.	[2]
( )	This is untypical; it rarely happens.	[1]
( )	This is not typical at all; it never happens.	[0 Favorable]

Means of Responses of Teachers and-Others in Elementary Schools to Item: 32



Means of Responses of Teachers-and-others in Elementary Schools to Item 33

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.61		K09	4.13	
						4.28	K11		3.91	K12
						3.86	K12	K03	3.84	
						3.85	K05		3.74	K14
						3.82	Mean		3.42	K05
					K06	3.73			3.36	Mean, K02
					K01	3.72		K08	3.32	
					K03	3.56			3.30	K13
					Mean	3.39			3.28	K11
					K04	3.38		Mean	3.24	
					K07	3.17		K06	3.20	
						3.12	K13	K10	3.18	
					K10	2.96		K07	3.17	
					K08	2.95		K04	2.86	
					K02	2.81		K01	2.71	
									2.50	K15

Districts

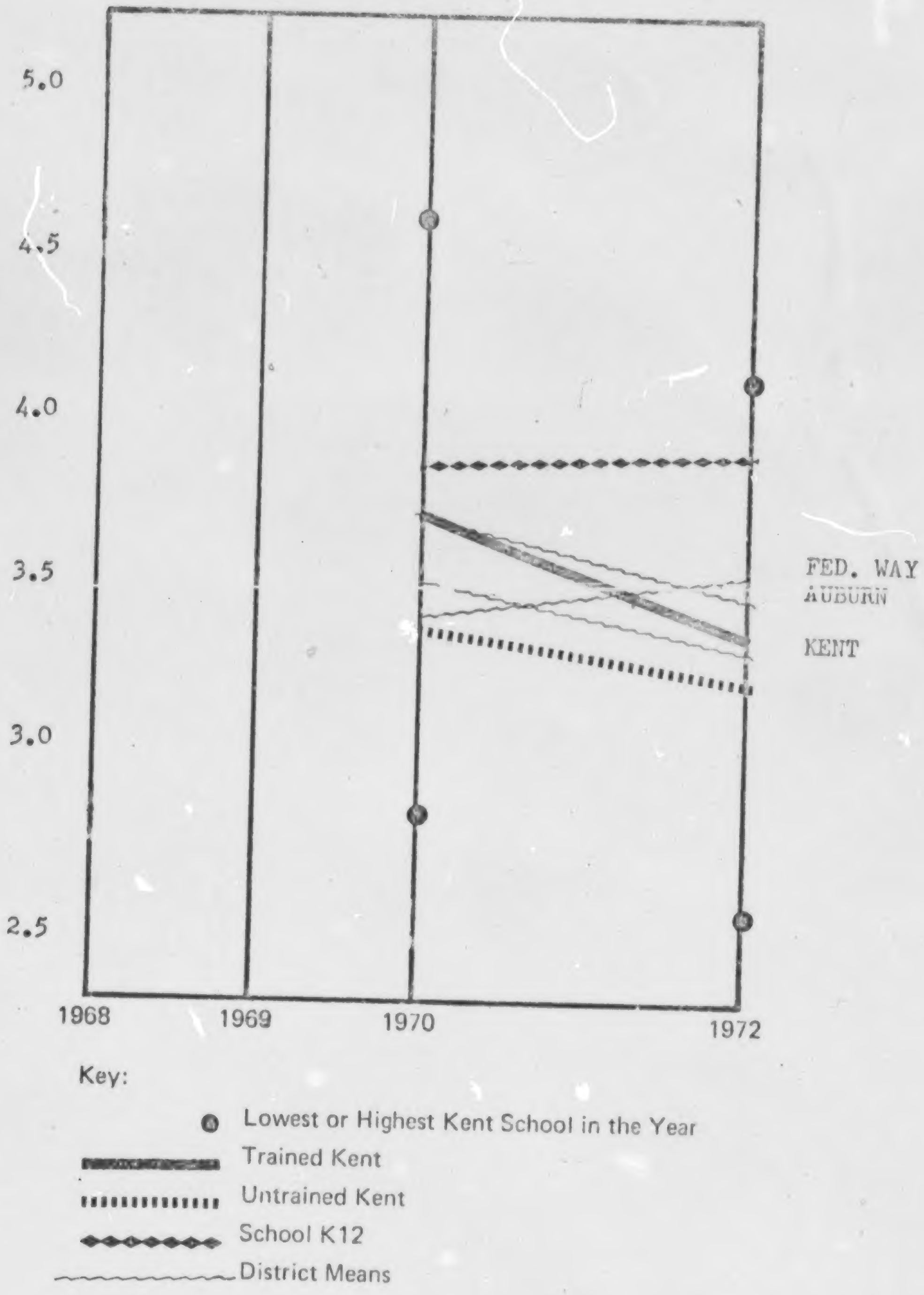
Kent	3.51	3.30
Auburn	3.75	3.49
Fed Wy	3.41	3.51

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

When a decision is made, it is clear who should carry it out, and when.

( )	This is *very* typical of the meeting; it happens repeatedly.	[5 Favorable]
( )	This is fairly typical of the meeting; it happens *often*.	[4]
( )	This is more typical than not; it happens *sometimes*.	[3]
( )	This is more untypical than typical, though it happens *now and then*.	[2]
( )	This is untypical; it *rarely* happens.	[1]
( )	This is not typical at all; it *never* happens.	[0 Unfavorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item: 33



Means of Responses of Teachers-and-others in Elementary Schools

to Item 34

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	1.43	K12		1.32	K12
						1.95	K05		1.79	K14
						1.99	Mean	K09	1.80	
					K06	2.16		K03	2.07	
					K08	2.24	K11	K04	2.24	
					K04	2.42			2.56	Mean
						2.44	K13	K10	2.65	
					K03	2.56			2.67	K11
					Mean	2.68			2.74	K13
					K01	3.05			2.79	K05
					K02	3.15		Mean	2.88	
					K10	3.32			2.93	K02
					K07	3.55		K06	2.95	
								K07	3.11	
								K08	3.89	
									3.95	K15

Districts

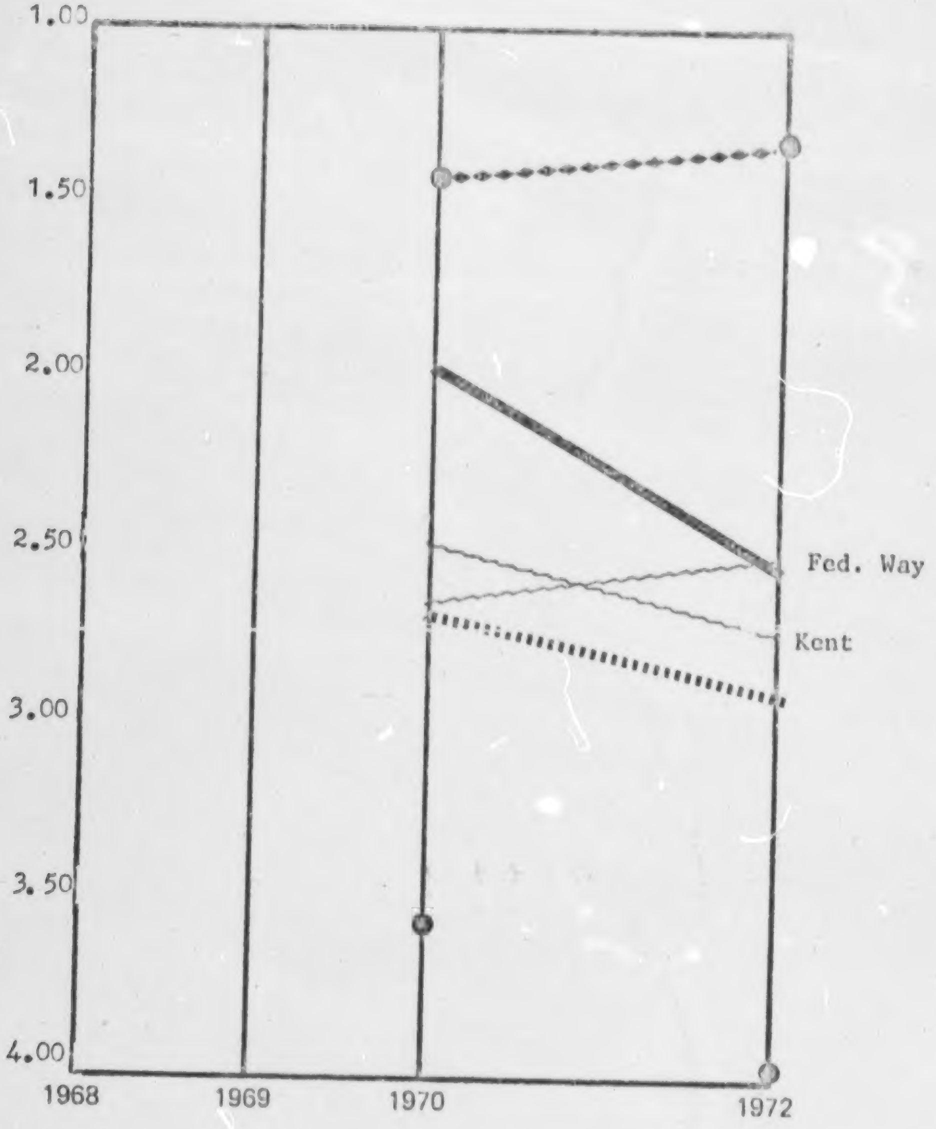
Kent	2.49	2.72
Auburn	2.03	2.07
Fed Wy	2.65	2.52

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

People don't seem to care about the meeting, or want to get involved in it.

( ) This is very typical of the meeting; it happens repeatedly. [5 Unfavorable]
( ) This is fairly typical of the meeting; it happens often. [4]
( ) This is more typical than not; it happens sometimes. [3]
( ) This is more untypical than typical, though it happens now and then. [2]
( ) This is untypical; it rarely happens. [1]
( ) This is not typical at all; it never happens. [0 Favorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 34



Key:

- ● Lowest or Highest Kent School in the Year
- ▬▬▬ Trained Kent
- ▮▮▮▮▮ Untrained Kent
- ◆◆◆◆◆ School K12
- ～～～ District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 35

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
						4.15	K05		4.05	K12
					K06	4.00			3.84	K14
					K08, 09	3.95	K12	K03	3.80	
					K10	3.70		K10	3.76	
						3.69	Mean		3.55	Mean
					K03	3.68			3.48	K11
					Mean	3.57	K11		3.47	K05
					K04	3.50			3.45	K15
					K07	3.26		K06	3.35	K13
					K02	3.11		K09	3.27	
					K01	3.06		Mean	3.22	
						2.93	K13	K04	3.19	
								K08	3.11	
									3.07	K02
								K01	2.90	
								K07	2.56	

Districts

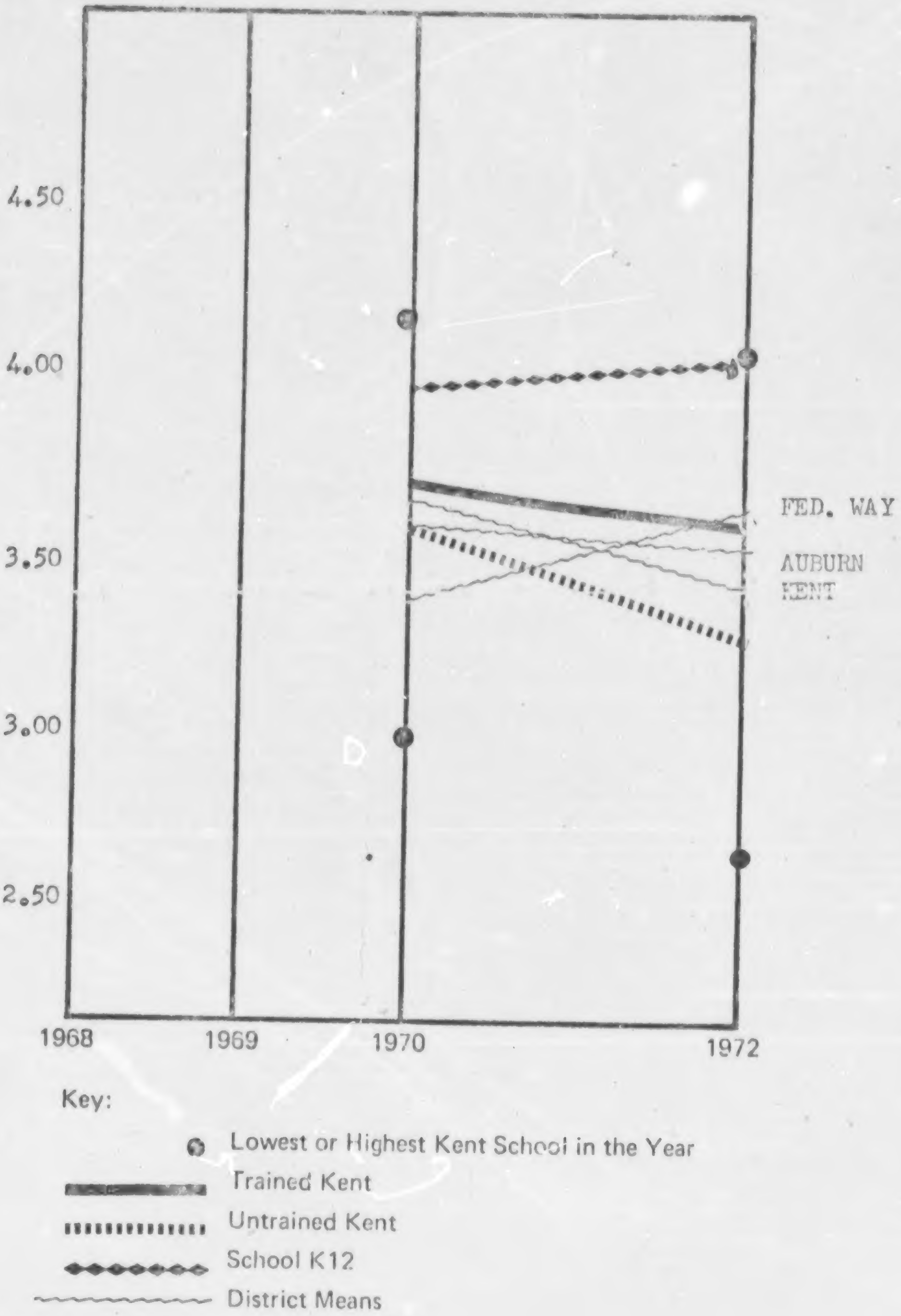
	1970	1972
Kent	3.60	3.38
Auburn	3.54	3.49
Fed Wy	3.32	3.58

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

When the group is thinking about a problem, at least two or three different solutions are suggested.

( ) This is _very_ typical of the meeting; it happens repeatedly. [5 Favorable]
( ) This is fairly typical of the meeting; it happens _often_. [4]
( ) This is more typical than not; it happens _sometimes_. [3]
( ) This is more untypical than typical, though it happens _now and then_. [2]
( ) This is untypical; it _rarely_ happens. [1]
( ) This is not typical at all; it _never_ happens. [0 Unfavorable]

Means of Responses of Teachers and Others
in Elementary Schools
to Item: 35



Means of Responses of Teachers-and-others in Elementary Schools to Item 36

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	.81		K09	1.26	
						1.00	K12		1.32	K12
						1.62	K11	K03	1.66	
						1.68	Mean		1.95	K14
					K06	1.74		K06	2.30	
					K04	1.77			2.33	Mean
						1.79	K05	K04	2.38	
					K08	1.90		K10	2.41	
					K03	1.94			2.50	K02
					Mean	2.24		Mean	2.51	
						2.50	K13		2.52	K05
					K02	2.52			2.54	K11
					K01	3.00			2.57	K13
					K07	3.04			2.95	K15
					K10	3.29		K07	3.06	
								K08	3.21	
								K01	3.33	

Districts

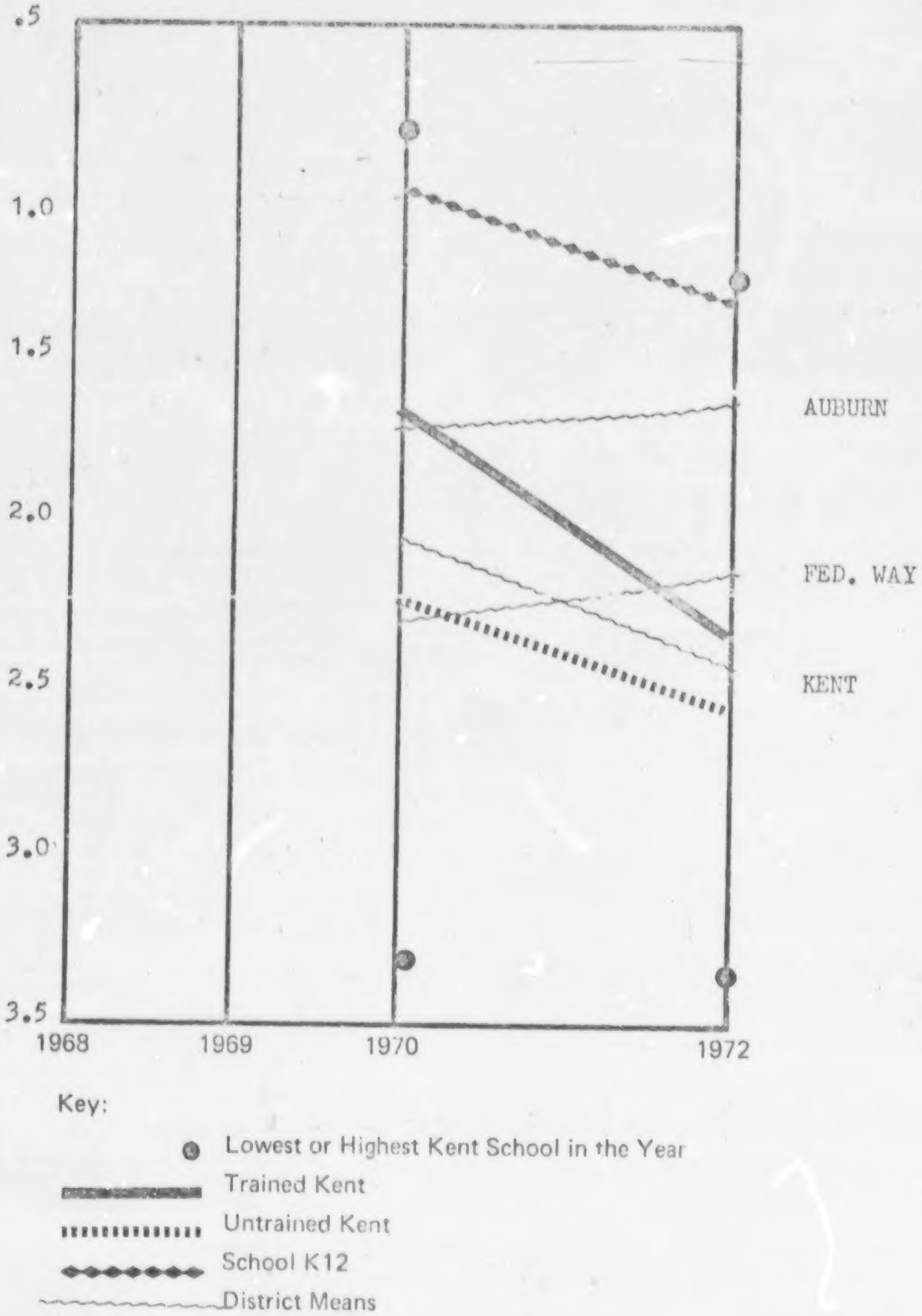
	1970	1972
Kent	2.08	2.42
Auburn	1.69	1.62
Fed Wy	2.29	2.13

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

The results of the group's work are not worth the time it takes.

- ( ) This is very typical of the meeting; it happens repeatedly. [5 Unfavorable]
- ( ) This is fairly typical of the meeting; it happens often. [4]
- ( ) This is more typical than not; it happens sometimes. [3]
- ( ) This is more untypical than typical, though it happens now and then. [2]
- ( ) This is untypical; it rarely happens. [1]
- ( ) This is not typical at all; it never happens. [0 Favorable]

Means of Responses of Teachers and Others in Elementary Schools to Item: 36



Means of Responses of Teachers-and-others in Elementary Schools

to Item 37

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	4.14			3.95	K12
						3.90	K12	K09	3.40	
					K03	3.75		K03	3.33	
					K06	3.58		K10	3.29	
						3.53	K11	K06	3.05	K14
						3.36	Mean		3.04	K11
					K04	3.31			2.98	Mean
						3.16	K05	Mean	2.90	
					K10	3.12			2.87	K13
					Mean	3.08		K04	2.86	
						2.69	K13	K07	2.72	K05
					K01	2.68			2.55	K15
					K07	2.61		K01	2.48	
					K08	2.45			2.36	K02
					K02	2.41		K08	2.32	

Districts

Kent	3.15	2.94
Auburn	3.51	3.28
Fed Wy	2.79	3.26

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

People feel very committed to carrying out the solutions arrived at by the group.

( ) This is very typical of the meeting; it happens repeatedly. [5 Favorable]
( ) This is fairly typical of the meeting; it happens often. [4]
( ) This is more typical and not; it happens sometimes. [3]
( ) This is more untypical than typical, though it happens now and then. [2]
( ) This is untypical; it rarely happens. [1]
( ) This is not typical at all; it never happens. [0 Unfavorable]

Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 38

Kent elementary schools

1968		1969			1970			1972		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
					K09	1.00			0.95	K12
						1.10	K12	K03	1.21	
					K03	1.33		K09	1.27	
					K06	1.37			1.53	K14
					K04	1.42		K04	1.76	K11
						1.62	K11		2.26	Mean
					K08	1.76		Mean	2.48	
						1.79	Mean	K06	2.50	K13
					K01	1.88		K10	2.17	
						1.95	K05		2.78	K02
					Mean	2.00		K01	3.05	
						2.69	K13	K08	3.26	
					K02	2.78			3.33	K15
					K10	2.83			3.47	K05
					K07	3.17		K07	3.67	

Districts

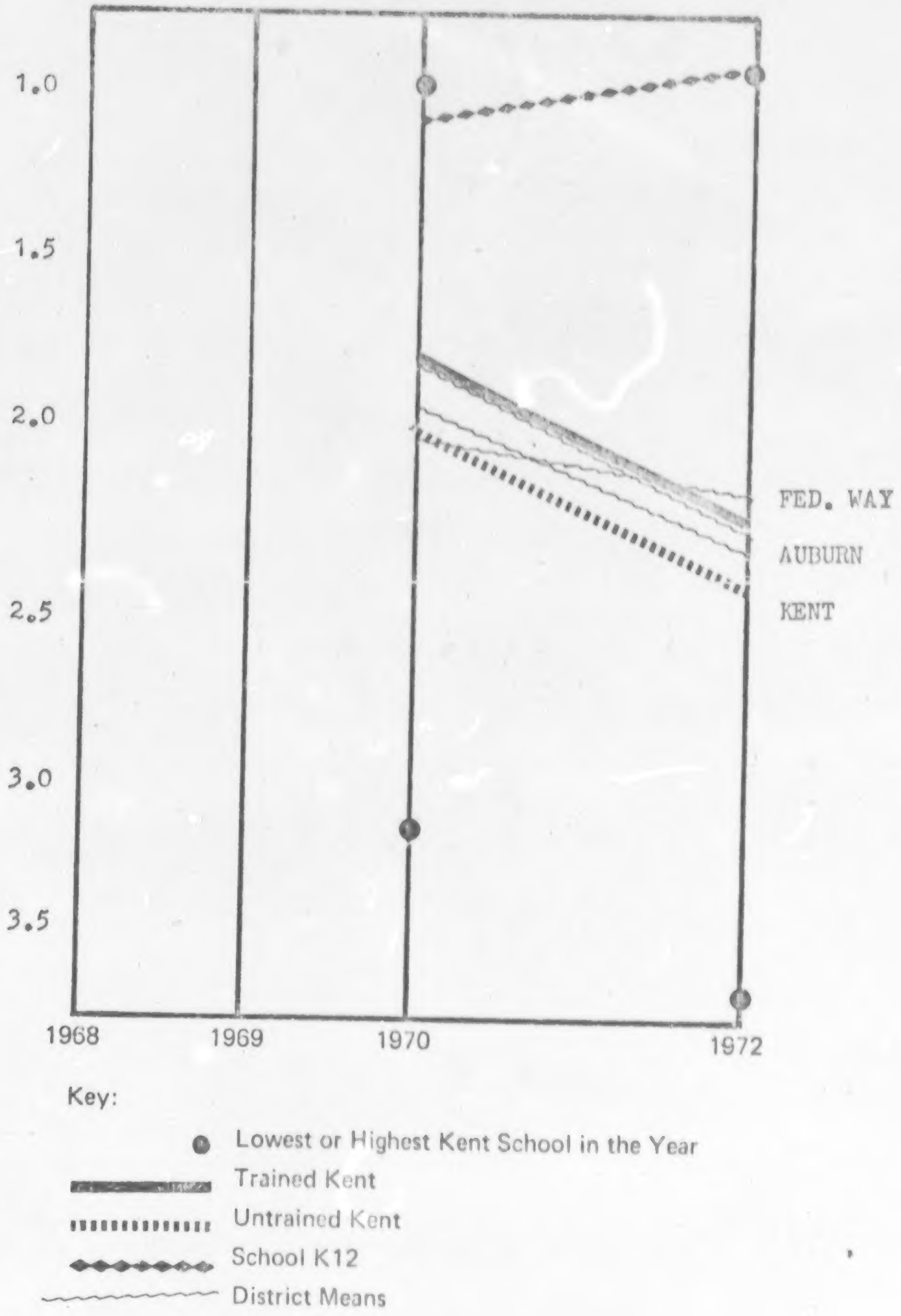
Kent	1.94	2.38
Auburn	1.81	2.28
Fed Wy	2.03	2.19

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

Solutions and decisions are in accord with the chairman's or leader's point of view, but not necessarily with the members'.

( ) This is *very* typical of the meeting; it happens repeatedly. [5 Unfavorable]
( ) This if fairly typical of the meeting; it happens *often*. [4]
( ) This is more typical than not; it happens sometimes. [3]
( ) This is more untypical than typical, though it happens *now and then*. [2]
( ) This is untypical; it *rarely* happens. [1]
( ) This is not typical at all; it *never* happens. [0 Favorable]

Means of Responses of Teachers and Others
in Elementary Schools
to Item: 38



Means of Responses of Teachers-and-others in Elementary Schools

to Item 39

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	.71		K03	1.21	
						1.71	K11	K09	1.40	
					K04, 06	1.85	K12		1.64	K12
					K03	2.12			1.68	K14
					K08	2.14			2.37	K05
						2.16	K05	K06	2.40	
						2.20	Mean	Mean	2.48	
					Mean	2.37			2.49	Mean
					K02	2.58		K04	2.62	
					K01	2.89			2.69	K13
					K07	3.26			2.71	K02
						3.31	K13	K08	2.79	
					K10	3.64		K01	2.81	
								K10	2.94	
									2.96	K11
								K07	3.11	
									3.30	K15

Districts

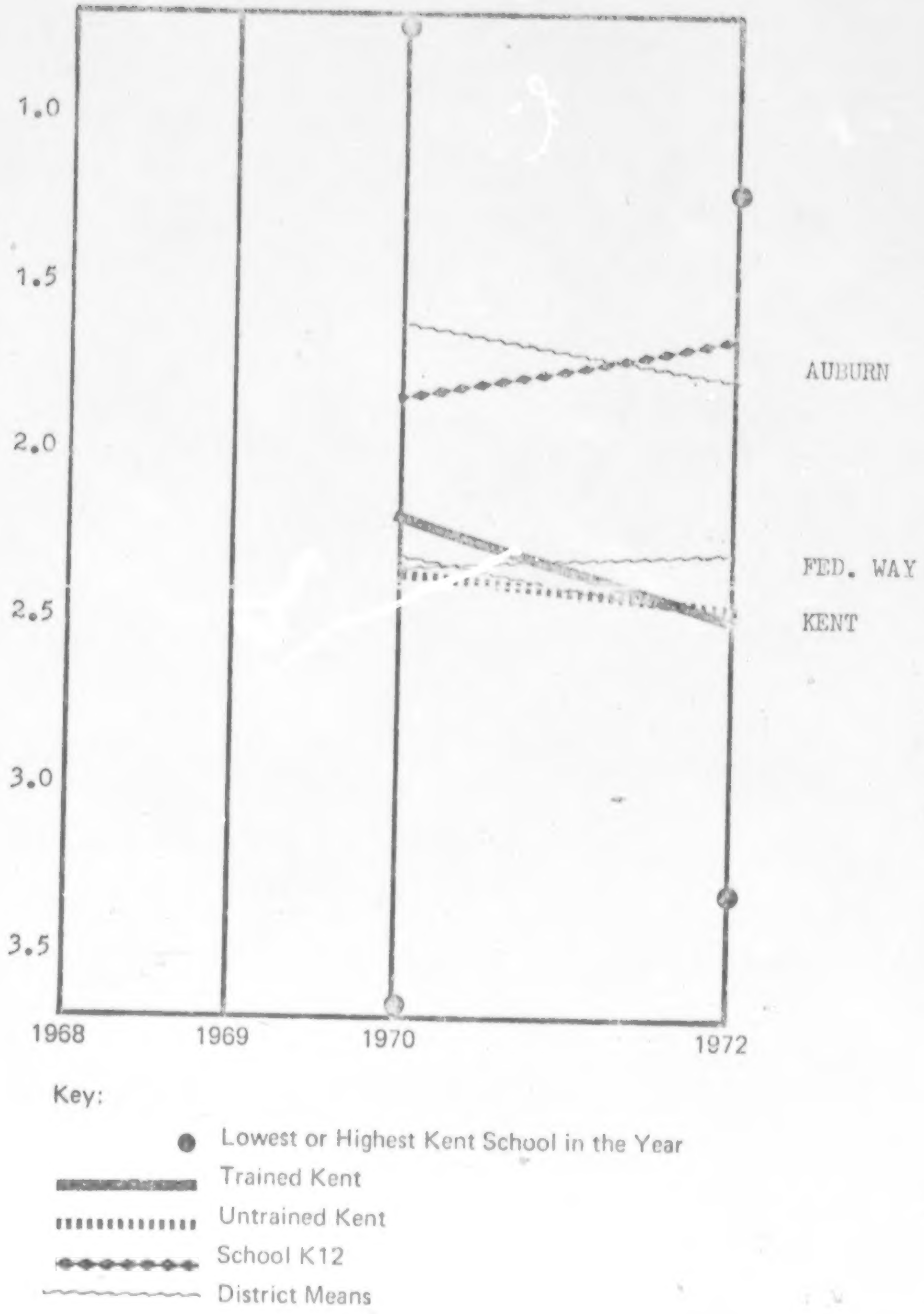
Kent	2.31	2.48
Auburn	1.61	1.76
Fed Wy	2.34	2.29

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

The discussion goes on and on without any decision being reached.

( )	This is *very* typical of the meeting; it happens repeatedly.	[5 Unfavorable]
( )	This is fairly typical of the meeting; it happens *often*.	[4]
( )	This is more typical than not; it happens *sometimes*.	[3]
( )	This is more untypical than typical, though it happens *now and then*.	[2]
( )	This is untypical; it *rarely* happens.	[1]
( )	This is not typical at all; it *never* happens.	[0 Favorable]

Means of Responses of Teachers-and-Others in Elementary Schools to Item: 39



Means of Responses of Teachers-and-others in Elementary Schools to Item 40

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
					K09	3.90			4.05	K12
						3.86	K11	K03	3.79	
					K06	3.50		K09	3.57	
						3.25	Mean,12		3.42	K14
					K03	3.12		K04	2.95	
						3.11	K05		2.93	Mean
					K08	3.04		K06	2.90	
					K04	3.00			2.89	K05
					Mean	2.78		K10	2.88	
						2.62	K13	Mean	2.80	
					K01	2.61			2.79	K11
					K02	2.37			2.57	K02
					K07	2.00		K01	2.43	
					K10	1.96			2.42	K13
									2.35	K15
								K07	2.22	
								K08	2.11	

Districts

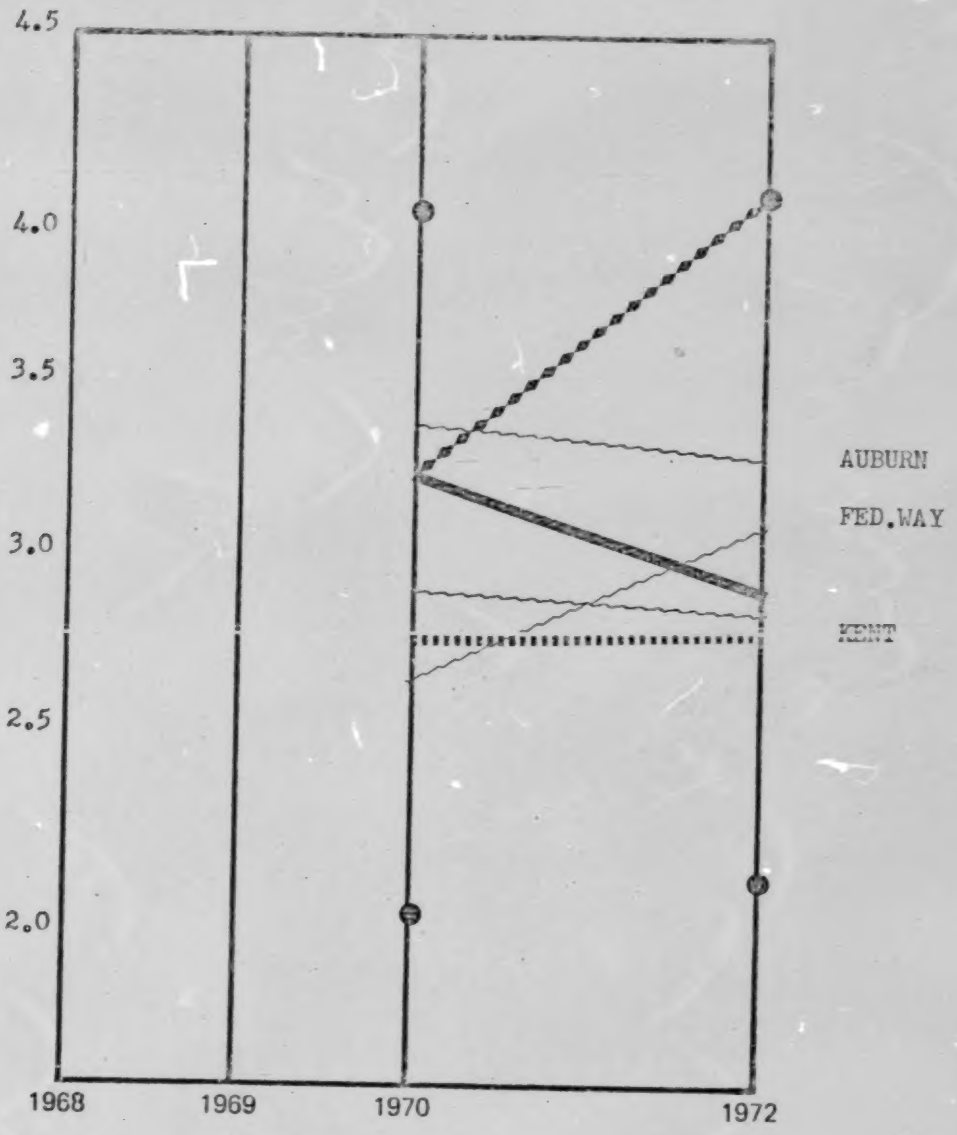
	1970	1972
Kent	2.91	2.87
Auburn	3.37	3.30
Fed Wy	2.65	3.14

Item: Please circle the numeral that best tells how often the thing happens that is mentioned in the item.

People feel satisfied or postive during the meeting.

( )	This is very typical of the meeting; it happens repeatedly.	[5 Favorable]
( )	This is failry typical of the meeting; it happens often.	[4]
( )	This is more typical than not; it happens sometimes.	[3]
( )	This is more untypical than typical, though it happens now and then.	[2]
( )	This is untypical; it rarely happens.	[1]
( )	This is not typical at all; it never happens.	[0 Unfavorable]

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item: 40



Key:

- ● Lowest or Highest Kent School in the Year
- ▬ Trained Kent
- ▮▮▮▮▮▮▮▮ Untrained Kent
- ◆◆◆◆◆◆◆ School K12
- 〰 District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 45

Kent elementary schools

1968		1969			1970			1972		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
K08	2.26	K12	2.33			1.82	K12		2.21	K12
K07	1.35	K03	2.23			1.73	K05		2.00	K14
K04	1.19		1.69	K05		1.55	Mean		1.75	K11
Mean	1.12	K08	1.63			1.52	K11		1.71	K05
K05	1.06	K04	1.52		K04, 07	1.27			1.65	Mean
K01	.94	Mean, 09	1.40		K08	1.13			1.41	K15
K09	.89		1.39	Mean	K02	1.11			1.38	K13
K03	.88	K06	1.20		Mean, 06	1.10		K04	1.22	
K10	.86	K01, 07	1.18		K03	1.06		K10	1.00	
K06	.64		1.13	K11	K01	.94		K03	.92	K02
K02	.31	K02	1.05		K10	.92		K06	.88	
		K10	1.04			.88	K13	Mean	.81	
					K09	.77		K01, 07	.76	
								K08	.65	
								K09	.31	

1970: Differences between means was significant, $t = 2.05$, $df = 11$, $p < .05$.

1972: Differences between means was significant, $t = 4.56$, $df = 14$, $p < .005$.

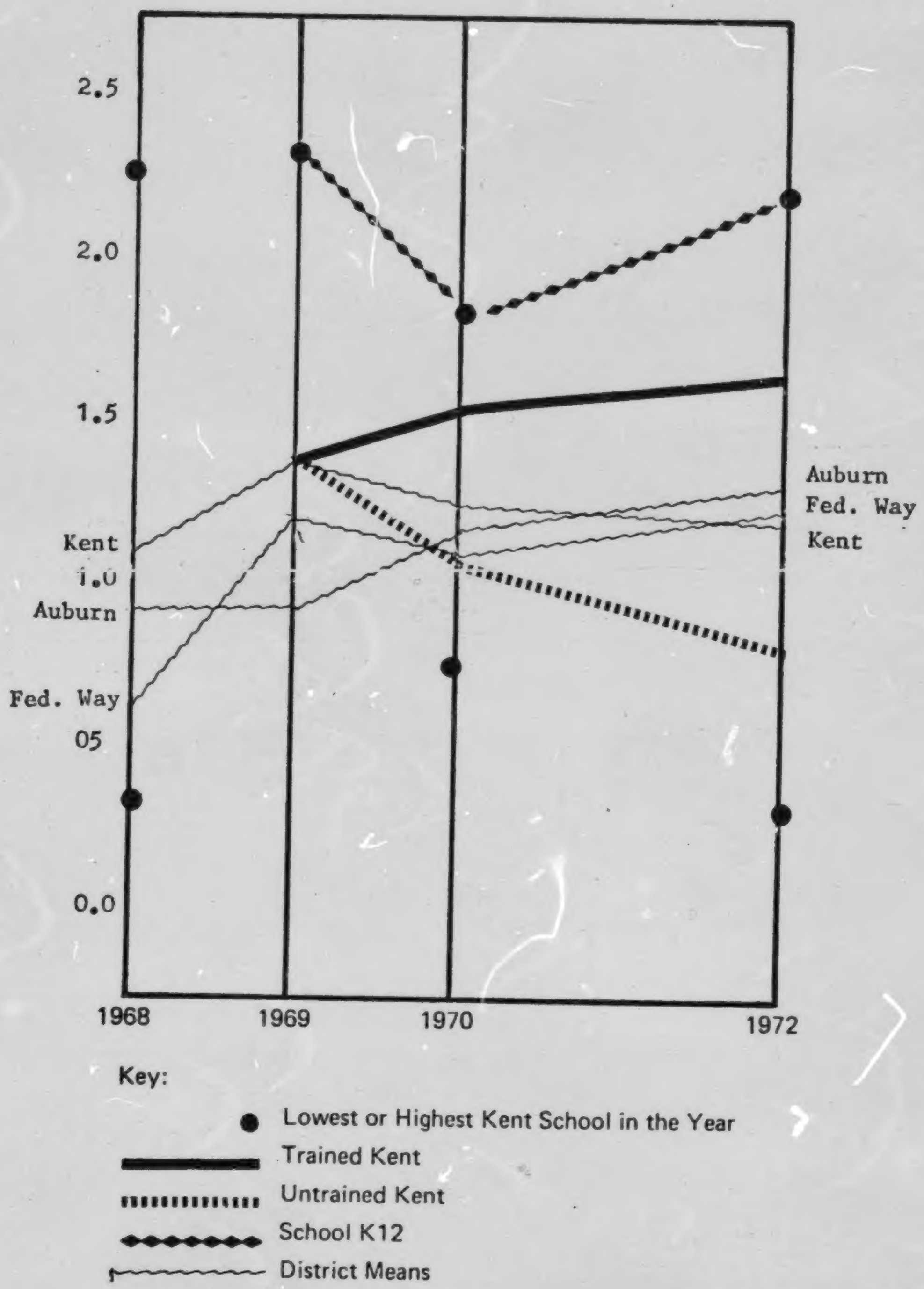
Districts

	1968	1969	1970	1972
Kent	1.12	1.39	1.24	1.22
Auburn	.93	.95	1.19	1.31
Fed Wy	.60	1.19	1.10	1.26

Item: In the previous item you indicated that at least some other person or persons were somehow involved in deciding upon the teaching methods to be used in your classroom. Please write below the names and positions of the other person(s) involved.

Scores consited of the number of persons listed by the respondent.

Means of Responses of Teachers-and-Others in Elementary Schools to Item 45



Handout Distributed at Superintendent's Cabinet Meetings

To the new participant at the Superintendent's staff meetings:
Here's some information that may be helpful to you. . . . . . .

WHAT ARE THE PURPOSES FOR HOLDING STAFF MEETINGS?

To provide the members of different District organizations and groups with the opportunity to ask questions and give feedback to the various agenda items;
To give you information regarding those items on the agenda;
To help the Superintendent become aware of the reactions of some staff members to issues.

WHAT KIND OF ITEMS WILL BE ON THE AGENDA?

Those kinds of items that have a general interest. For instance, ______________________ was an agenda item at a recent meeting. Information that needs little reaction will not usually be brought to staff meetings.

ARE DECISIONS MADE AT STAFF MEETINGS?

No, they are not. Decisions are made by the administrators of the various programs through proper channels. The purpose of the staff meeting, as has been previously stated, is to gather information and provide feedback to the Superintendent, to others at the staff meeting, and to those people for whom you may be a representative.

WHO IS IN CHARGE OF THE STAFF MEETINGS?

The Superintendent is in charge. But in this role he will usually request other persons to make presentations to the group and to serve as moderators for parts of the meeting. In this way the Superintendent can function more as a member of the group.

WHAT SHOULD YOU DO AT THESE MEETINGS?

You should discuss or question those items on the agenda where what you are thinking would make a contribution to the group. You should not feel any compulsion to speak on a topic unless there is a reason for you to do so; on the other hand, it is urged that when you have something to say that you do say it.

If you come as a representative for others, you will want to inform them about what took place at the meeting. You will be describing the kinds of proposals that were brought out and the reactions of people to them.

WHAT WILL BE CONSIDERED THE IDEAL COMMUNICATION PATTERN IN THE STAFF MEETINGS?

There is a subject appropriate for consideration;
There is adequate reaction and feedback;
Questions are asked in a constructive manner;
Alternative approaches to problems are examined;
Reporters show respect and appreciation for questions, and they avoid defensive behavior;
Persons at staff meetings feel they have reasonably discussed the issues;
The Superintendent feels he has the information and options he needs for decision making.

Appendix 7-B

Years of administrations of pretest and posttest and categorizations of elementary schools of four districts on the independent variables T, V, and C

(see text for explanation of the symbols TVC, etc.)

		Years of ...			
School	Category at pretest	pre-test	posttests		
K01	tVC	68	70	72	
K02	tvc	68	70	72	(Tvc at '72 posttest)
K03	tvc	68	70	72	
K04	tvC	68	70	72	
K05	TVc	68	70	72	
K06	tvC	68	70	72	
K07	tvc	68	70	72	
K08	tvC	68	70	72	
K09	tvC	68	70	72	
K10	tVc	68	70	72	
K12	TVC	69	70	72	
E02	TVC	70	71		
E05	TVC	70	71	72	
E06	tVc	70	71	72	
E07	TVC	70	71	72	
E08	TVc	70	71		
E09	tvC	70	71	72	
F01	tvC	68	69	72	
F02	tVC	68	69	72	
F04	tvC	68	70	72	
F05	tvc	68	69	72	
F07	tVC	68	69	72	
F10	tVc	68	69	72	
F13	tvc	68	69	72	
A01	tvc	68	70		
A02	tVC	68	70	72	
A04	tvc	68	70	72	
A06	tVc	68	70	72	
A07	tvc	68	70	72	
A08	tVc	69	70	72	

Appendix 7-C

Mean scores of elementary schools of four districts on dependent variables at first and second posttests within indicated categories

(see text for meaning of categories)

Category	Numbers of schools		Influence at first posttest	Actual collaboration		Involving students		Innovations	
	1st	2nd		1st	2nd	1st	2nd	1st	2nd
TVC	4	3	360	223	191	22.3	1.9	53	30
TVc	2	1	289	163	95	13.5	0.0	8	5
tVC	4	4	215	135	105	7.2	2.4	31	29
tVc	5	5	306	168	132	12.3	1.8	29	43
tvC	7	7	284	139	106	10.5	0.8	34	27
Tvc	0	1	---	---	129	----	7.1	--	43
tvc	8	6	237	149	101	7.6	1.1	31	30
All schools	30	27*	277	159	125	11.1	1.6	34	31

* The school that was A01 in 1970 combined with A05 in 1972 to form A12. Schools E02 and E08 were not administered questionnaires in 1972.

Appendix 7-D

Mean responses of elementary schools in Kent and mean responses of the Auburn and Federal Way districts to questionnaire items 53, 54, 55, 57, and 61 in all years when administered

Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 53

Kent elementary schools

1968		1969			1970		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K04	71	K03	92			94	K13
K07	67	K12	89			91	K12
K05, 08	64	K06	87	K11	K03	90	
K02	62	K08	84		K08	87	Mean
Mean	58	K07	83		K02	86	K11
K06	57		82	Mean	K06	85	
K09	55		77	K05		82	K05
K03	54	K09	75		K04	81	
K01	41	Mean	72		Mean	79	
K10	29	K01, 02	65		K07	78	
		K10	56		K09	77	
		K04	50		K10	68	
					K01	60	

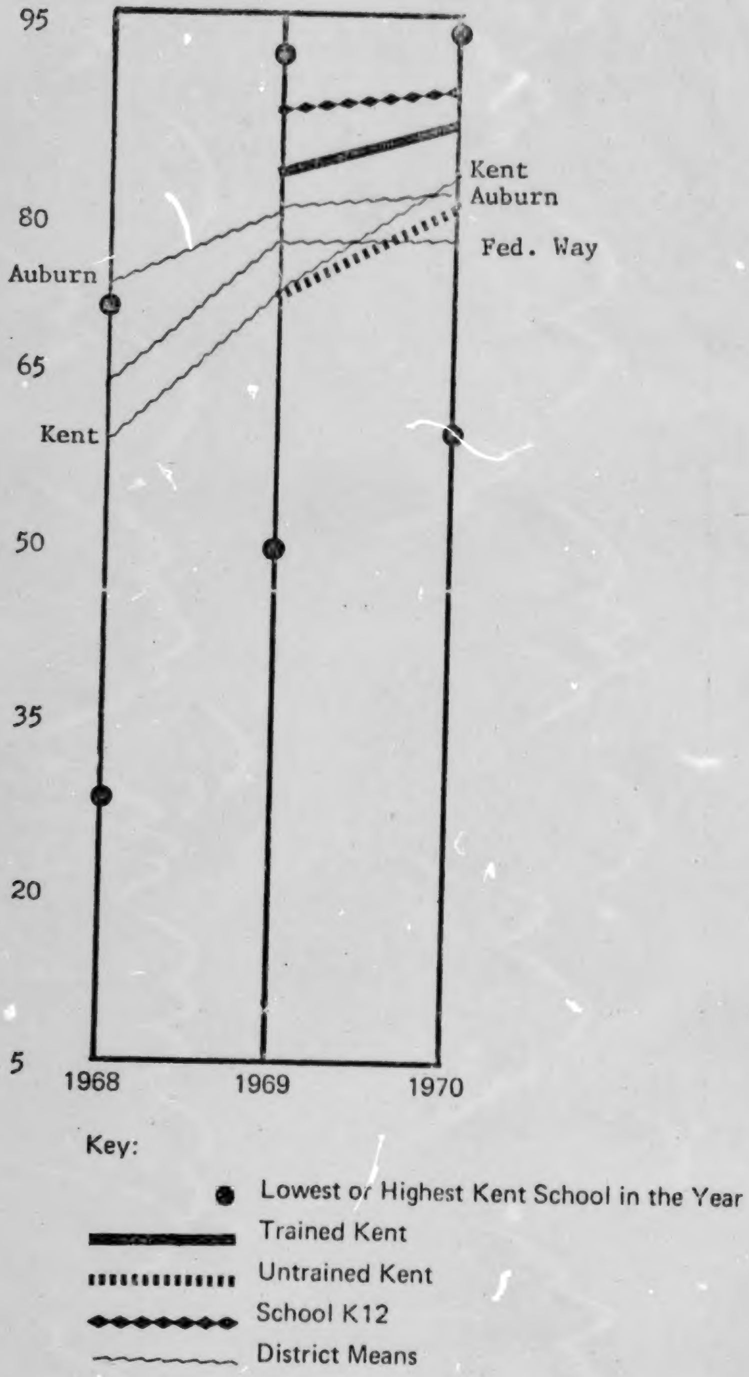
Districts

	1968	1969	1970
Kent	58	73	82
Auburn	73	79	80
Fed Wy	62	76	77

Item: Regardless of policy or who now does it, whom would you prefer to plan and develop the school curriculum?

Scores consisted of number of person marking: A group of teachers.

ITEM 53


95
80
65
50
35
20
5
1968
1969
1970
Auburn
Kent
Kent
Auburn
Fed. Way
Key:
● Lowest or Highest Kent School in the Year
Trained Kent
Untrained Kent
School K12
District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 54

Kent elementary schools

1968		1969			1970		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
K10	3.79	K12	4.56			4.62	K12
K05	3.76	K03	4.00	K05		4.29	K11
K04	3.64		3.96	Mean		4.18	Mean
K02	3.61		3.93	K11	K06	4.10	
Mean	3.56	K01	3.82			4.00	K05
K01, 09	3.50	K04	3.81		K09	3.95	
K06	3.46	K09	3.75		K03	3.94	
K03	3.44	K08	3.74			3.80	K13
K07	3.43	Mean	3.60		K04, 10	3.68	
K08	3.36	K07	3.39		Mean	3.55	
		K10	3.33		K08	3.45	
		K06	3.27		K01	3.26	
		K02	3.00		K02	3.07	

The difference between 1969 means was significant: t= 2.50, df= 10, $p < .05$.

The difference between 1970 means was significant: t=2.85, df= 11, $p < .02$.

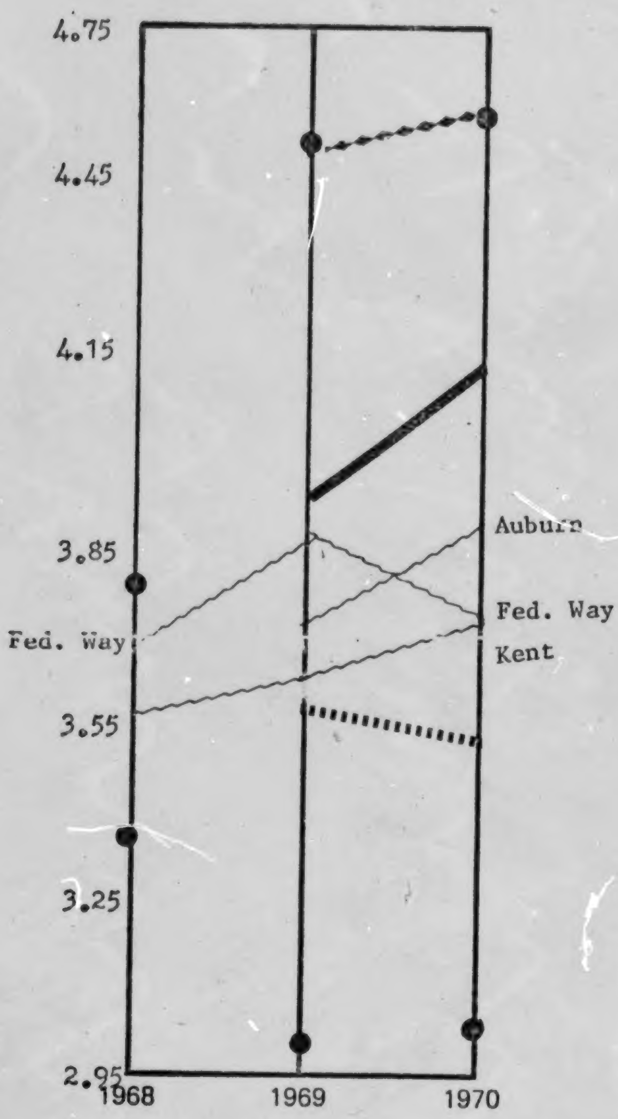
Districts

	1968	1969	1970
Kent	3.56	3.65	3.75
Auburn	Not Adm.	3.76	3.92
Fed Wy	3.70	3.87	3.75

Item: In general, how much influence do you feel the teachers as a group have on how your school is run?

( ) No influence. [1 Unfavorable]
( ) Little influence. [2]
( ) Some influence. [3]
( ) Considerable influence. [4]
( ) Great deal of influence. [5 Favorable]
( ) I have no opinion. [not tallied]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 54



Key:

- ● Lowest or Highest Kent School in the Year
- ▬ Trained Kent
- ▮▮▮▮ Untrained Kent
- ◆◆◆◆ School K12
- 〰 District Means

Means of Responses of Teachers-and-others in Elementary Schools to Item 55

Kent elementary schools

1968		1969			1970		
Untr schs	Mean score	Untr schs	Mean score	Trnd schs	Untr schs	Mean score	Trnd schs
K02	3.67	K12	4.11			4.24	K12
K10	3.62	K03	4.08		K03	4.17	
K04	3.29		3.75	K05	K09	3.95	
K09	3.17		3.69	Mean		3.76	K11
Mean	3.12		3.64	K11	K04	3.71	
K05	3.10	K04	3.60		K06	3.70	Mean
K07	3.00	K09	3.50			3.50	K05
K03	2.89	K01	3.41		K01	3.37	
K08	2.86	Mean	3.35		Mean	3.28	
K01	2.81	K06	3.33			3.27	K13
K06	2.69	K07	3.24		K10	3.20	
		K10	3.13		K08	2.81	
		K08	3.06		K07	2.64	
		K02	2.68		K02	2.43	

The difference between means was significant: $t = 2.27$, $df = 10$, $p < .05$.

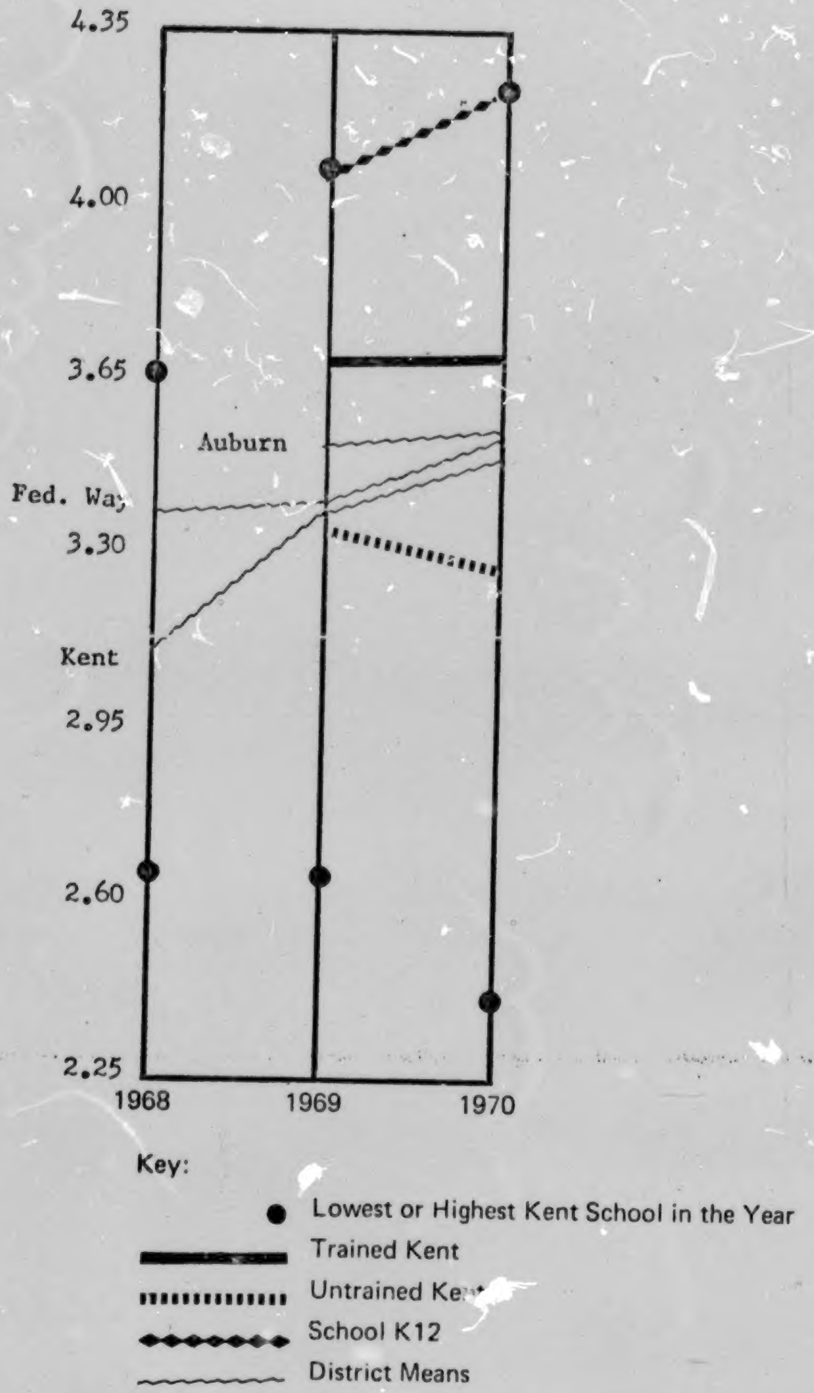
Districts

	1968	1969	1970
Kent	3.12	3.39	3.41
Auburn	Not Adm.	3.43	3.51
Fed Wy	3.40	3.40	3.48

Item: In general, how much influence do the teachers in your school have on the principal when it comes to his activities and decisions that affect the performance of your school?

( )	No influence.	[1 Unfavorable]
( )	Little influence.	[2]
( )	Some influence.	[3]
( )	Considerable influence.	[4]
( )	Great deal of influence.	[5 Favorable]
( )	I have no opinion.	[not tallied]

Means of Responses of Teachers and Others in Elementary Schools to Item: 55



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 57

Kent elementary schools

1968 Untr schs	1968 % fav
K08	67
K06	64
K05, 07	48
K10	47
Mean, 09	43
K04	42
K01	37
K03	18
K02	10

1969 Untr schs	1969 % fav	1969 Trnd schs
K03	75	
K04	60	
K07	56	
	55	K05
K01	47	
	46	Mean
Mean	44	
K09	43	
K08, 10	42	
	40	K11
K06, 12	33	
K02	16	

1970 Untr schs	1970 % fav	1970 Trnd schs
K07	67	
K01	64	
K10	60	
K03, 04	56	
Mean	53	
K06	50	
K09, 08	45	
	42	K11
K02	40	K05
	36	Mean
	33	K13
	27	K12

1972 Untr schs	1972 % fav	1972 Trnd schs
K03, 08 10	50	K02
	45	K11
	44	K15
K04	43	
K06	41	
Mean	39	
	35	Mean, 13
	32	K12
	28	K05
K07, 09	27	
K01	18	
	14	K14

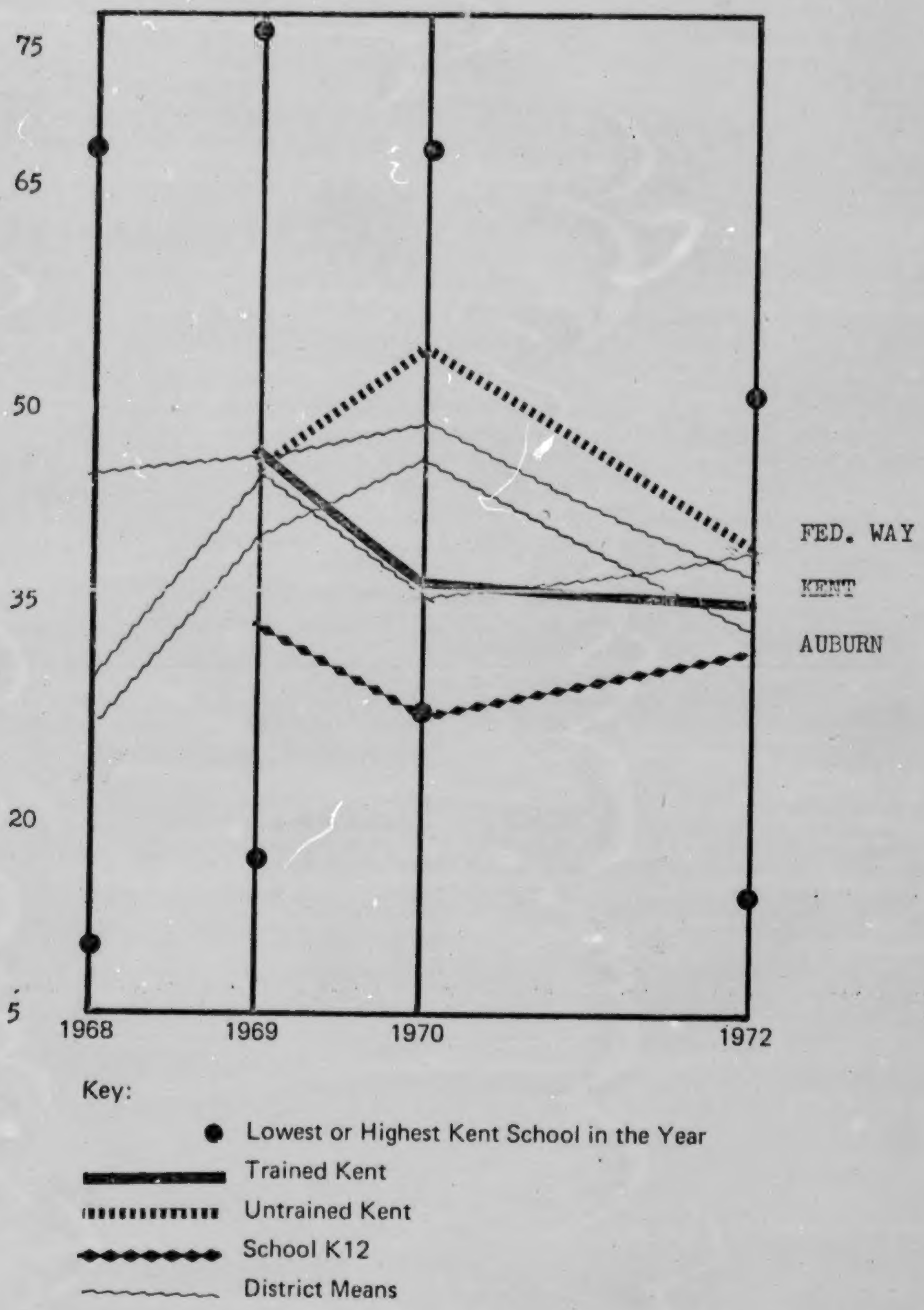
Districts

	1968	1969	1970	1972
Kent	43	45	48	37
Auburn	26	39	45	33
Fed Wy	29	44	35	39

Item: This item concerns the choice of teaching methods you use in your classroom.

Scores consisted of the percentage of individuals choosing: Within certains limits I can choose my own teaching methods, as their choice.

Percentages of Favorable Responses
of Teachers-and-Others
In Elementary Schools to Item: 57



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 61

Kent elementary schools

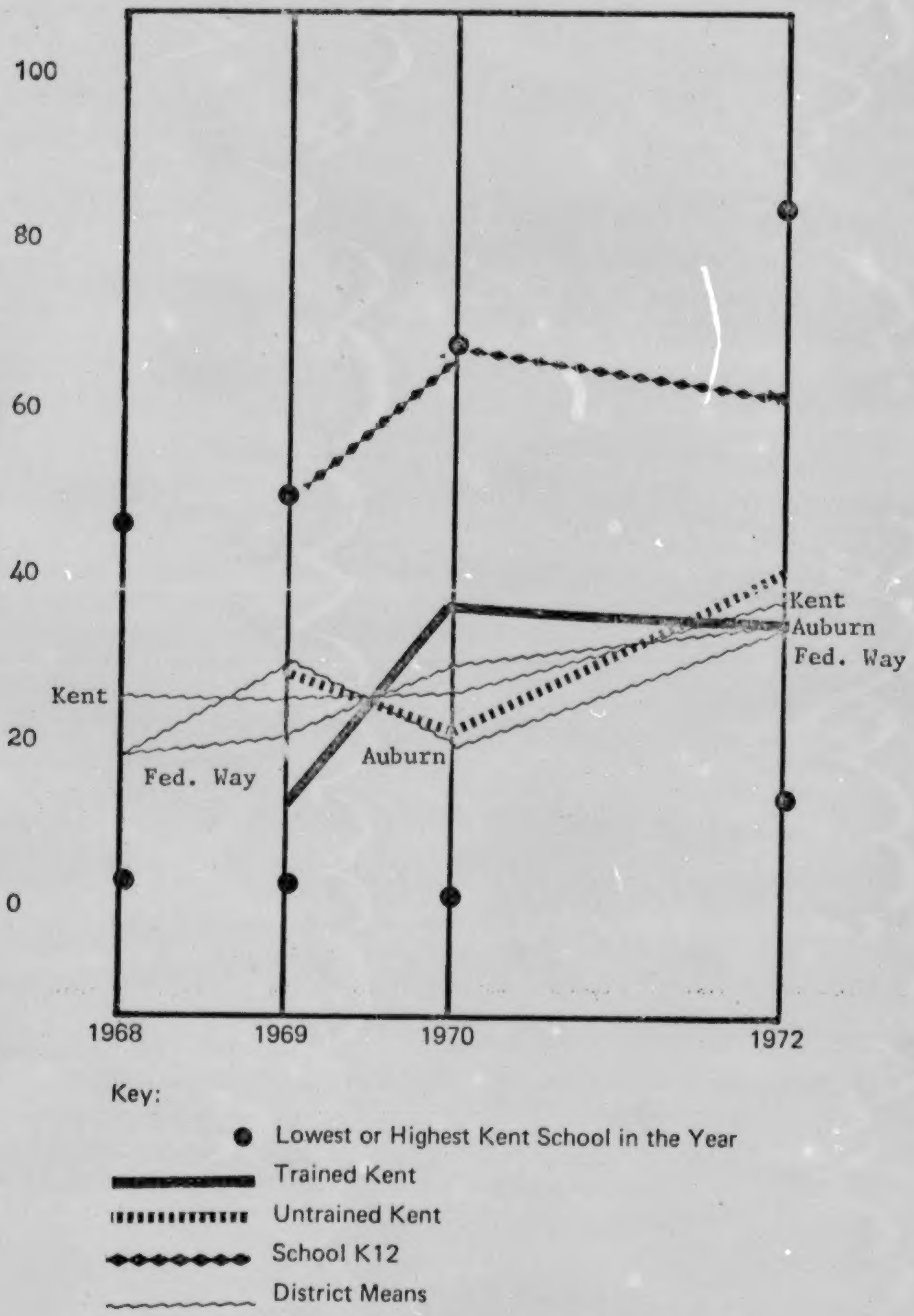
1968		1969			1970			1972		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K02	48	K12	51			70	K12	K03	87	
K10	46	K08	47		K07	39		K09	75	
K07	31	K04	43		K09	38	Mean		63	K12
K04	30	K03	39		K04	31			57	K02
K01	28	Mean, 09	31		K10, 03	30		K10	48	
Mean	27	K01	30			29	K11	Mean	43	
K08	25	K10	29			27	K05		40	K14
K09	20		23	K05		24	K13	K04	38	
K06	17	K07	22		Mean	23			37	Mean
K05	14	K06	20		K08	18		K06	36	
K03	8		15	Mean	K01, 06	10			33	K11
		K02	11		K02	4			30	K05
			7	K11				K01	27	
								K08	26	K13
								K07	24	
									16	K15

Districts

	1968	1969	1970	1972
Kent	27	28	28	40
Auburn	20	23	32	37
Fed Wy	20	32	22	37

Item: If your were to change to a new job during the next three years (in or out of education) where would you want it to be?

Percentages of Favorable Responses of Teachers-and-Others In Elementary Schools to Item 61



APPENDIX 8-A

Raw means of trained and untrained elementary schools in Kent and of the elementary schools pooled in the Auburn and Federal Way districts on the questionnaire items comprising tests G, H, I, and J.

Item 62: test G

Each person was asked to respond to the following item:

Part A Perhaps there are some people in your organization with whom you talk rather frequently about matters important to you. Please think of people with whom you talk seriously about things important to you, inside or outside formal meetings, once a week or more on the average. Write their names below. (If there are fewer than six people with whom you talk once a week about matters important to you, write down only as many as there are; if none, write "none". If there are more than six, list just the six with whom you feel your conversations are the most satisfying).

Part B Now look back at the above question. Perhaps you know whether some of the six people talk to each other about matters important to them. Please look at each pair of names and indicate the pair(s) of persons you have reason to believe talk to each other once a week or more about matters important to them.

Using the following steps, we computed the average number of communication links accurately identified by the respondents in each school. A communication link was identified as a pair of persons who stated they talked to each other once a week or more about matters important to them.

Step 1. We ascertained if the respondent had told us, in response to Part B, whether a paricular pair of persons talked to each other. A plus one (+1) was assigned to each of these instances. A minus one (-1) was assigned to the case(s) where the respondent said a pair of people did not talk to one another.

Step 2. From their own responses, we ascertained whether the pairs of persons identified in Step 1 in fact said that they did or did not talk to one another. A plus one (+1) was assigned to each pair of persons of whom both said they talked to each other. A minus one (-1) was assigned to each pair of persons of whom only one or neither said they talked to each other.

Step 3. The values assigned to a given pair in Step 1 (+1 or -1) were then multiplied by the values given that same pair in Step 2 (+1 or -1). This product tells us whether the respondent guessed right (a positive product) or wrong (a negative product) about that particular communication link.

Step 4. The procedures in Step 3 were repeated for all pairs and all combinations mentioned by the respondents. The scores were averaged and reported as the mean number of communication links accurately identified within each school.

Note: The raw scores could range from +15 to -15 for each individual.

Means of Raw Scores of Teachers-and Others in Elementary Schools on Item 62: test G

Kent elementary schools

1968	
Untr schs	Mean score
K06	.80
K05	.63
K08	.62
K03	.57
K10	.28
Mean	.20
K02	.09
K07	.04
K01	.00
K04	-.24
K09	-.30

1969		
Untr schs	Mean score	Trnd schs
	1.56	K11
K04	.83	
	.73	Mean
K07	.42	
K02	.24	
K01	.21	
K08	.05	
K06	.00	
Mean	-.06	
	-.21	K05
K12	-.30	
K10	-.54	
K03	-.79	
K09	-1.24	

1970		
Untr schs	Mean score	Trnd schs
	1.38	K12
K04	1.15	
K08	.92	
	.91	K11
K07	.88	
K10	.85	
	.75	Mean
Mean	.53	
K06	.48	
	.46	K05
	.28	K13
K02	.24	
K03	.14	
K09	.00	
K01	-.10	

1972		
Untr schs	Mean score	Trnd schs
	2.77	K11
	1.78	K12
	1.43	K14
	1.27	Mean
	1.18	K05
K08	1.15	
K06	1.00	
	.90	K15
K04	.82	
K09	.50	
K07	.47	
Mean	.46	
	.27	K02
	.24	K13
K01	.05	
K03	-.19	
K10	-.33	

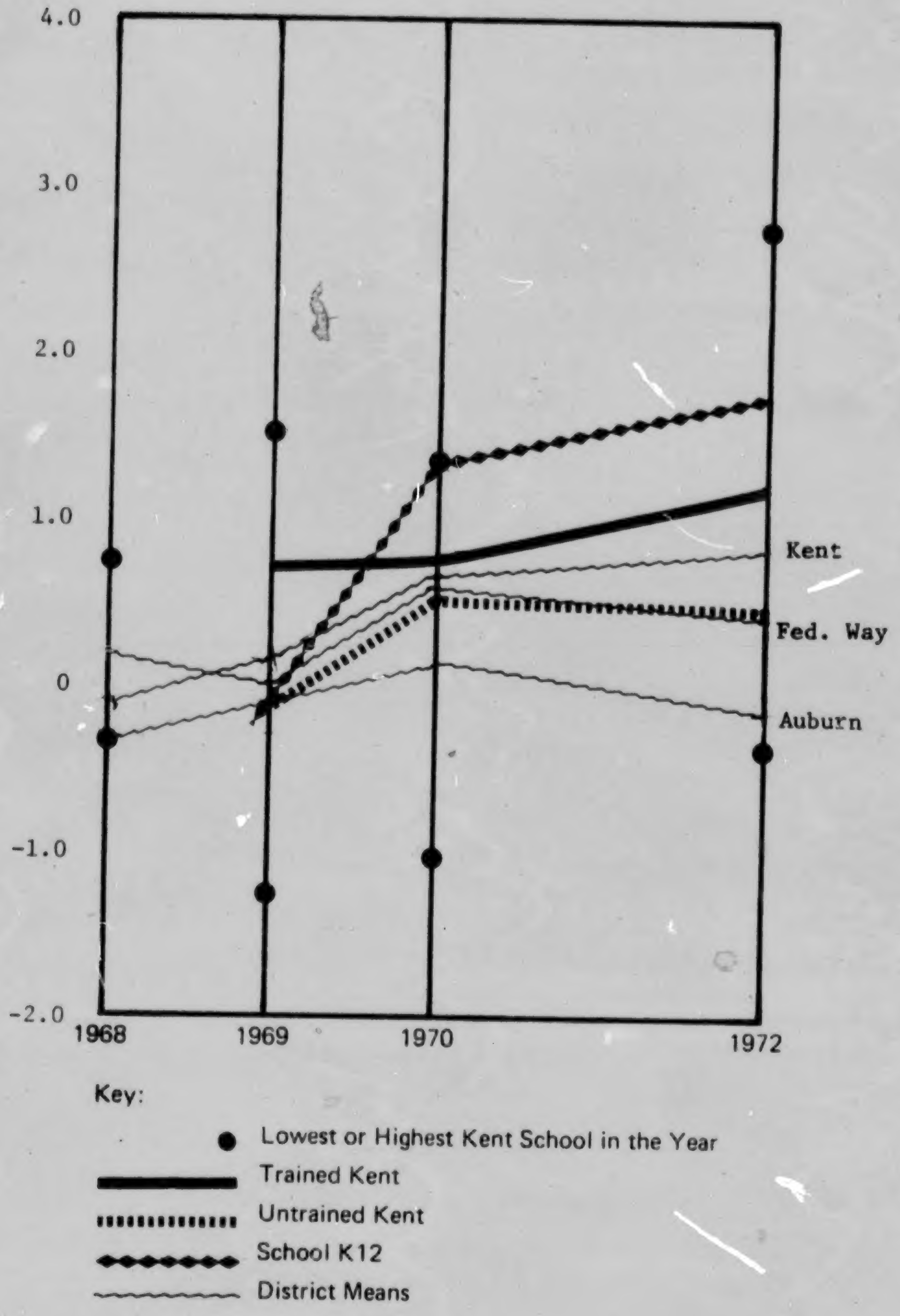
Districts

Kent	.20	.05	.59	.87
Auburn	-.04	.17	.67	-.12
Fed Wy	.15	-.08	.13	.42

Means of Raw Scores of Teachers-and-Others

in Elementary Schools

on Item 62: test G



Means of Raw Scores of Teachers-and-Others in Elementary Schools

on Item 45: test H

Kent elementary schools

1968	
Untr schs	Mean score
K08	2.26
K07	1.35
K04	1.19
Mean	1.12
K05	1.06
K01	.94
K09	.89
K03	.88
K10	.86
K06	.64
K02	.31

1969		
Untr schs	Mean score	Trnd schs
K12	2.33	
K03	2.23	
	1.69	K05
K08	1.63	
K04	1.52	
Mean, 09	1.40	
	1.39	Mean
K06	1.20	
K01, 07	1.18	
	1.13	K11
K02	1.05	
K10	1.04	

1970		
Untr schs	Mean score	Trnd schs
	1.82	K12
	1.73	K05
	1.55	Mean
	1.52	K11
K04, 07	1.27	
K08	1.13	
K02	1.11	
Mean, 06	1.10	
K03	1.06	
K01	.94	
K10	.92	
	.88	K13
K09	.77	

Differences between means was significant, $t = 2.05$, $df = 11$, $p < .05$.

1972		
Untr schs	Mean score	Trnd schs
	2.21	K12
	2.00	K14
	1.75	K11
	1.71	K05
	1.65	Mean
	1.41	K15
	1.38	K13
K04	1.22	
K10	1.00	
K03	.92	K02
K06	.88	
Mean	.81	
K01, 07	.76	
K08	.65	
K09	.31	

Differences between means was significant, $t = 4.56$, $df = 14$, $p < .005$.

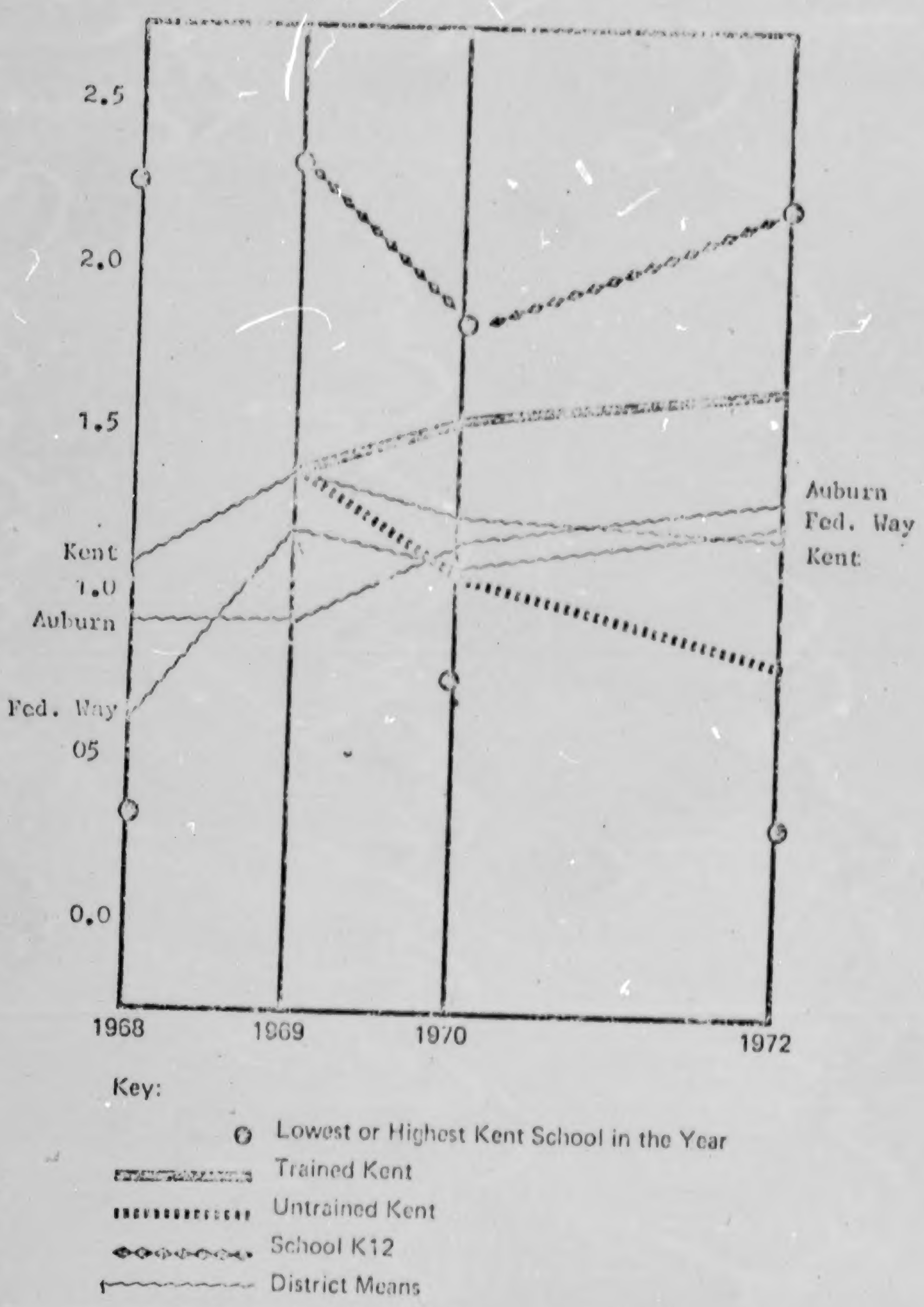
Districts

Kent	1.12	1.39	1.24	1.22
Auburn	.93	.95	1.19	1.31
Fed Wy	.60	1.19	1.10	1.26

Item: In the previous item you indicated that at least some other person or persons were somehow involved in deciding upon the teaching methods to be used in your classroom. Please write below the names and positions of the other person(s) involved.

Scores consited of the number of persons listed by the respondent.

Means of Raw Scores of Teachers-and-Others
in Elementary Schools
on Item 45: test H



Percentages of Favorable Responses (Raw Scores) of Teachers-and-Others in Elementary Schools to Item 56: test I

Kent elementary schools

1968		1969			1970			1972		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K08	48	K12	78			83	K12		76	K11
K04	42	K07	67			65	Mean, 13		75	K15
K01, 05	41	K03	62			58	K05		64	K12
Mean	32	K06	60			55	K11		55	K14
K06	29	K04	55		K08	52			52	Mean
K02	24		54	K05	K02	50		K06	50	
K03, 09	23		50	Mean	K09	41		K04	48	
K07	21	Mean	49		Mean, 10	36			43	K02
K10	18		47	K11	K03, 04	35		K03	38	
		K02	45		K07	26		Mean, 09	35	
		K01	41		K01, 06	20		K01	33	
		K10	40					K10	29	
		K08	32					K07	26	
		K09	31						25	K05, 13
								K08	21	

For difference between means, t=4.10, df=11, $p < .005$.

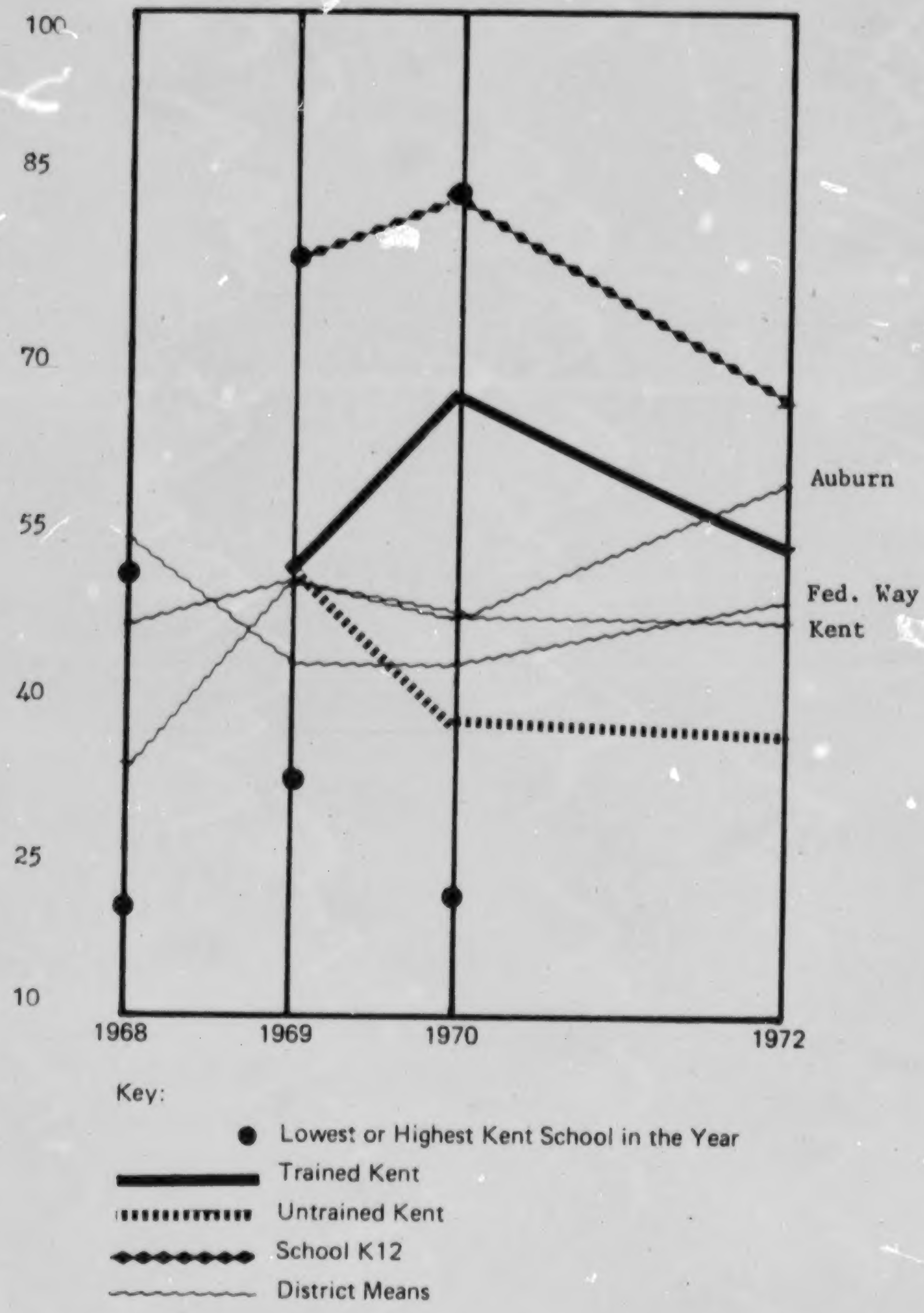
Districts

	1968	1969	1970	1972
Kent	32	49	45	43
Auburn	45	48	45	58
Fed Wy	53	42	42	47

Item: Regardless of the official policy, who actually plans and develops the school curriculum?

Scores consisted of number of persons marking: A group of teachers.

Percentages of Favorable Responses (Raw Scores)
of Teachers-and-Others
in Elementary schools to Item 56: test I



Percentages of Favorable Responses (Raw Scores) of Teachers-and-Others in Elementary Schools to Item 63: test I

Kent elementary schools

1968		1969			1970			1972		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K06	50	K12	44			62	K11		91	K12
K05	36		31	K05		43	K12		64	K11
K08	24		25	Mean		36	Mean		55	K15
Mean	16	K03	23		K06	35			47	Mean
K03	15		20	K11	K02	29			36	K02
K02	14	K01, 04	18			24	K13	K06	35	
K10	12	K08	16		K04	23			30	K14
K04	10	Mean , 02	15			21	K05		29	K05
K07	8	K09	13		Mean, 09	18		K08	26	
K09	5	K07	11		K10	16			25	K13
K01	0	K10	8		K01, 03	15		K09	18	
		K06	0		K08	13		Mean	17	
					K07	0		K01, 04	14	
								K07	11	
								K03, 10	6	

Districts

Kent	16	16	24	32
Auburn	24	26	22	31
Fed Wy	15	14	21	30

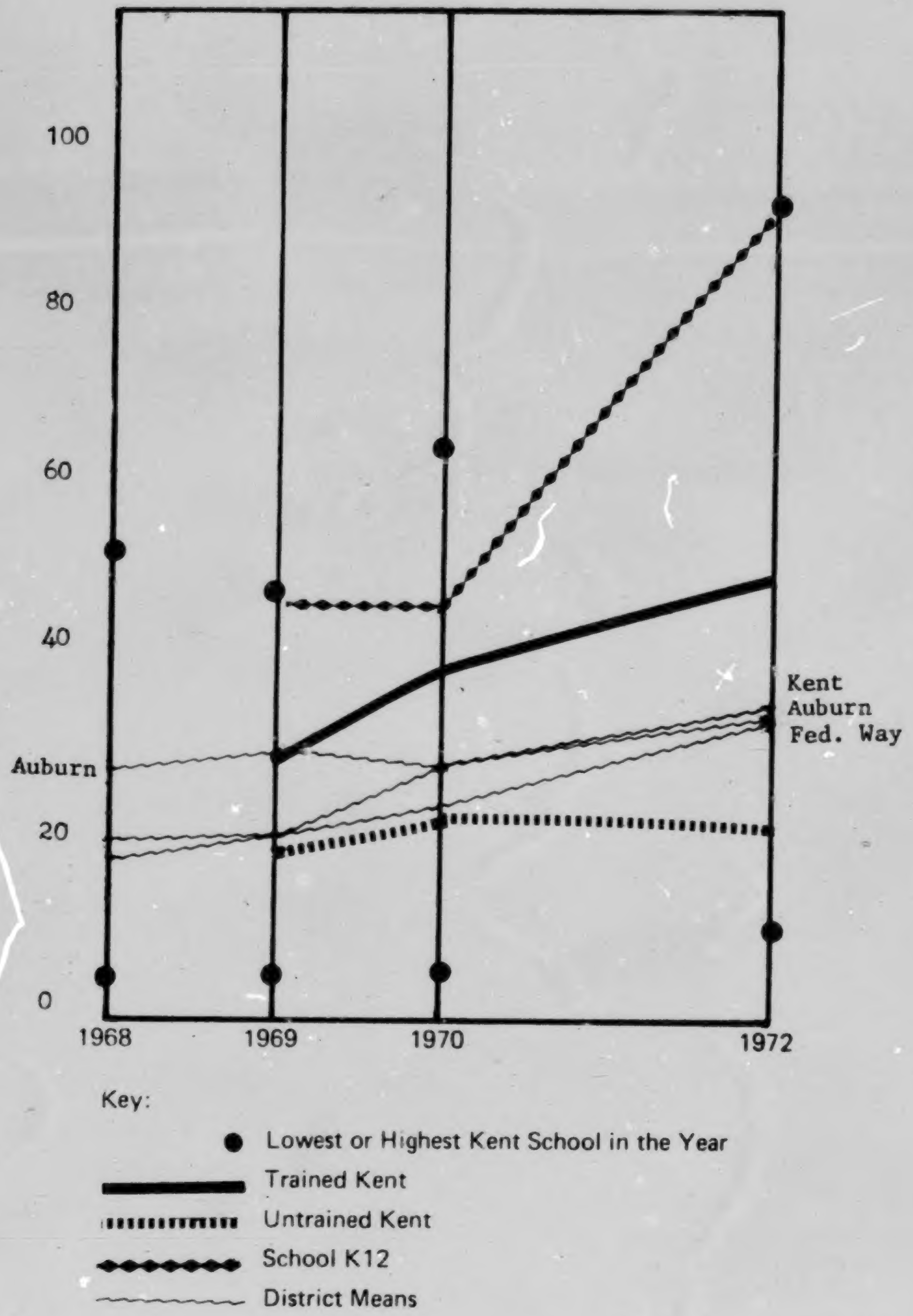
Item: Regardless of the official policy, who actually develops regulations for student conduct?

Scores consisted of number of persons marking: A group of teachers.

Percentages of Favorable Responses (Raw Scores)

of Teachers-and-Others

in Elementary Schools to Item 63: test I



Means of Raw Scores of Teachers-and-others in Elementary Schools to Item 64: test J

Kent elementary schools

1968

Untr schs	Mean score
K08	1.40
K05	1.36
K07	1.25
K04	1.23
Mean	1.09
K06, 09 10	1.00
K02	.86
K01	.77
K03	.62

1969

Untr schs	Mean score	Trnd schs
K09	1.50	
K03	1.46	
K12	1.44	
K06	1.40	
K08	1.32	
Mean	1.22	
K01	1.18	
K02	1.15	
K10	1.12	
	1.08	K05
	1.07	Mean, K11
K04	1.00	
K07	.94	

1970

Untr schs	Mean score	Trnd schs
	1.74	K12
K09	1.55	
K03	1.50	
	1.48	K11
	1.46	Mean
K06	1.40	
K04	1.35	K13
K02	1.32	
	1.30	K05
Mean	1.25	
K10	1.20	
K08	1.13	
K07	1.09	
K01	.65	

1972

Untr schs	Mean score	Trnd schs
K04	1.71	
	1.64	K12
K06	1.60	
	1.50	K02
	1.45	K14
K10	1.41	
	1.33	Mean
	1.29	K05
	1.25	K13
Mean	1.23	
	1.15	K15
	1.16	K11
K01	1.14	
K03	1.13	
K08	1.05	
K09	.94	
K07	.74	

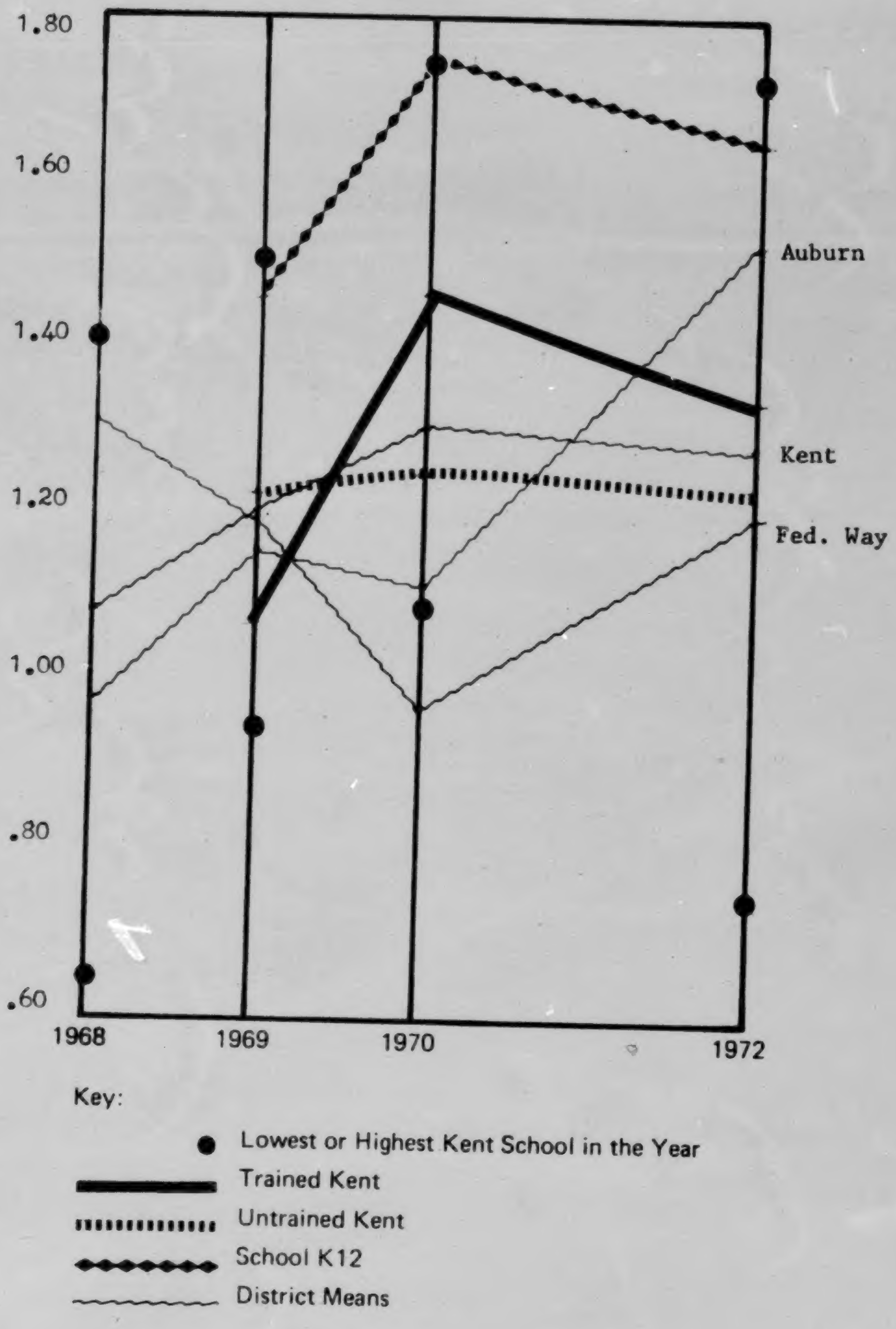
Districts

Kent	1.09	1.20	1.31	1.28
Auburn	.98	1.16	1.12	1.52
Fed Wy	1.31	1.20	.97	1.20

Item: When you want to receive approval from faculty in your school for an idea you are proposing, it is sometimes helpful to enlist the support of certain individuals in your school. Please list below, by name and position, the individuals whose support for your ideas would help most in obtaining faculty approval.

* Scores consisted of number of persons listed.

Means of Raw Scores of Teachers-and-Others
in Elementary Schools
on Item 64: test J



Percentages of Favorable Responses (Raw Scores) of Teachers-and-Others in Elementary Schools to Item 65: test J

Kent elementary schools

1968		1969			1970			1972		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K08	67	K03	75		K07	67		K03, 08 10	50	K02
K06	64	K04	60		K01	64			45	K11
K05, 07	48	K07	56		K10	60			44	K15
K10	47		55	K05	K03, 04	56		K04	43	
Mean, 09	43	K01	47		Mean	53		K06	41	
K04	42		46	Mean	K06	50		Mean	39	
K01	37	Mean	44		K09, 08	45			35	Mean, 13
K03	18	K09	43			42	K11		32	K12
K02	10	K08, 10	42		K02	40	K05		28	K05
			40	K11		36	Mean	K07, 09	27	
		K06, 12	33			33	K13	K01	18	
		K02	16			27	K12		14	K14

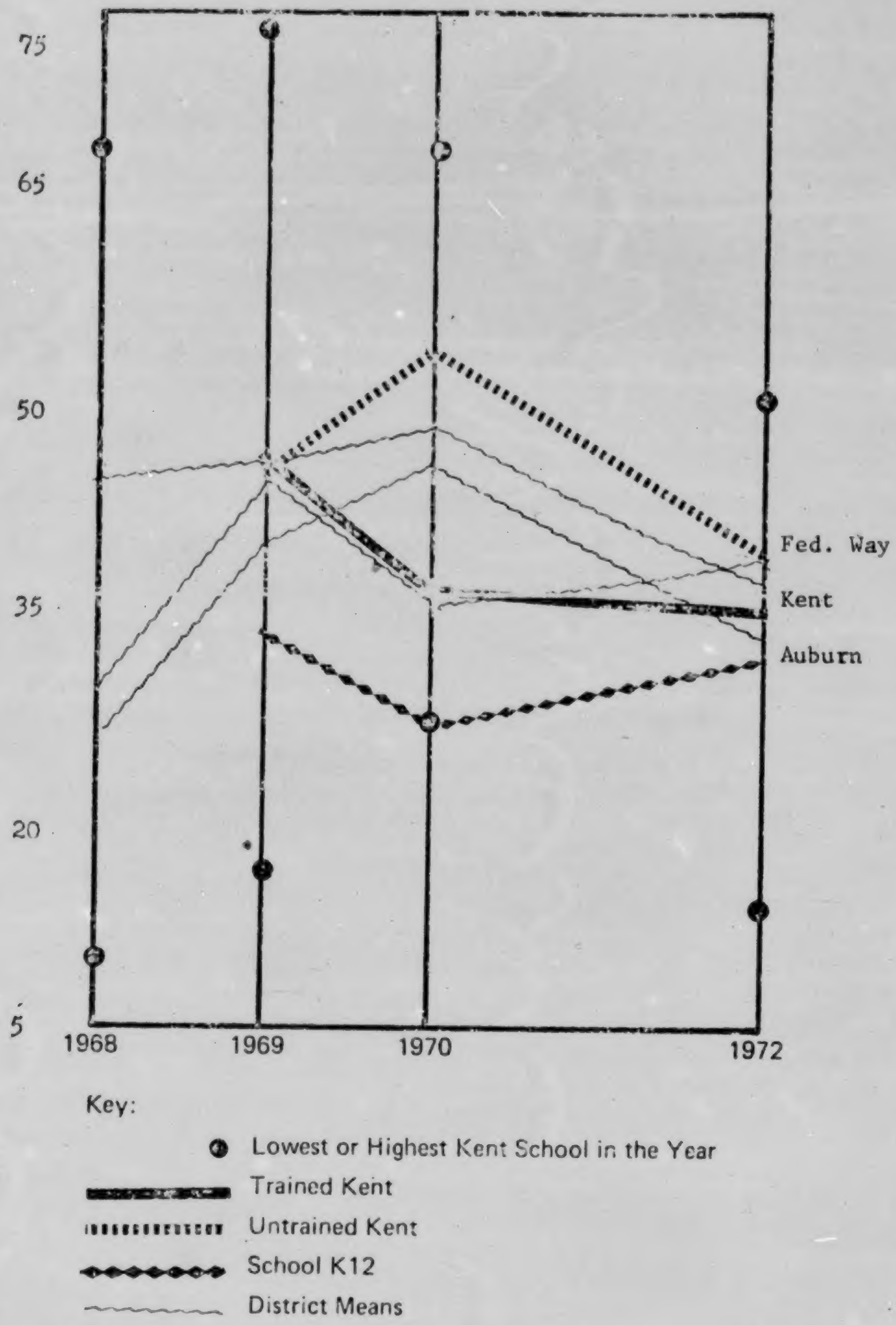
Districts

	1968	1969	1970	1972
Kent	43	45	48	37
Auburn	26	39	45	33
Fed Wy	29	44	35	39

Item: This item concerns the choice of teaching methods you use in your classroom.

Scores consisted of the percentage of individuals choosing: Within certains limits I can choose my own teaching methods, as their choice.

Percentages of Favorable Responses (Raw Scores)
of Teachers-and-Others
in Elementary Schools to Item 65: Test J



Percentages of Favorable Responses (Raw Scores) of Teachers-and-Others in Elementary Schools to Item 66: test J

Kent elementary schools

1968	
Untr schs	% fav
K04	6
K09	5
K07	4
K01, 02 03, 05 06, 08 10	0

1969		
Untr schs	% fav	Trnd schs
K12	33	
	13	K11
	12	Mean
K07	11	
	9	K05
K02, 08	5	
Mean	4	
K01, 03 04, 06 09, 10	0	

1970		
Untr schs	% fav	Trnd schs
	50	K12
	32	K11
	26	Mean
	17	K05
K02	16	
K03	13	
K08	5	
Mean	4	
K01, 04 06, 07 09, 10	0	K13

1972		
Untr schs	% fav	Trnd schs
	36	K14
	26	K12
	13	Mean
	11	K05
	9	K11
	5	K13
K01, 03 04, 06 07, 08 09, 10 Mean	0	K02, 15

Districts

	1968	1969	1970	1972
Kent	2	5	11	7
Auburn	0	2	8	9
Fed Wy	1	1	16	10

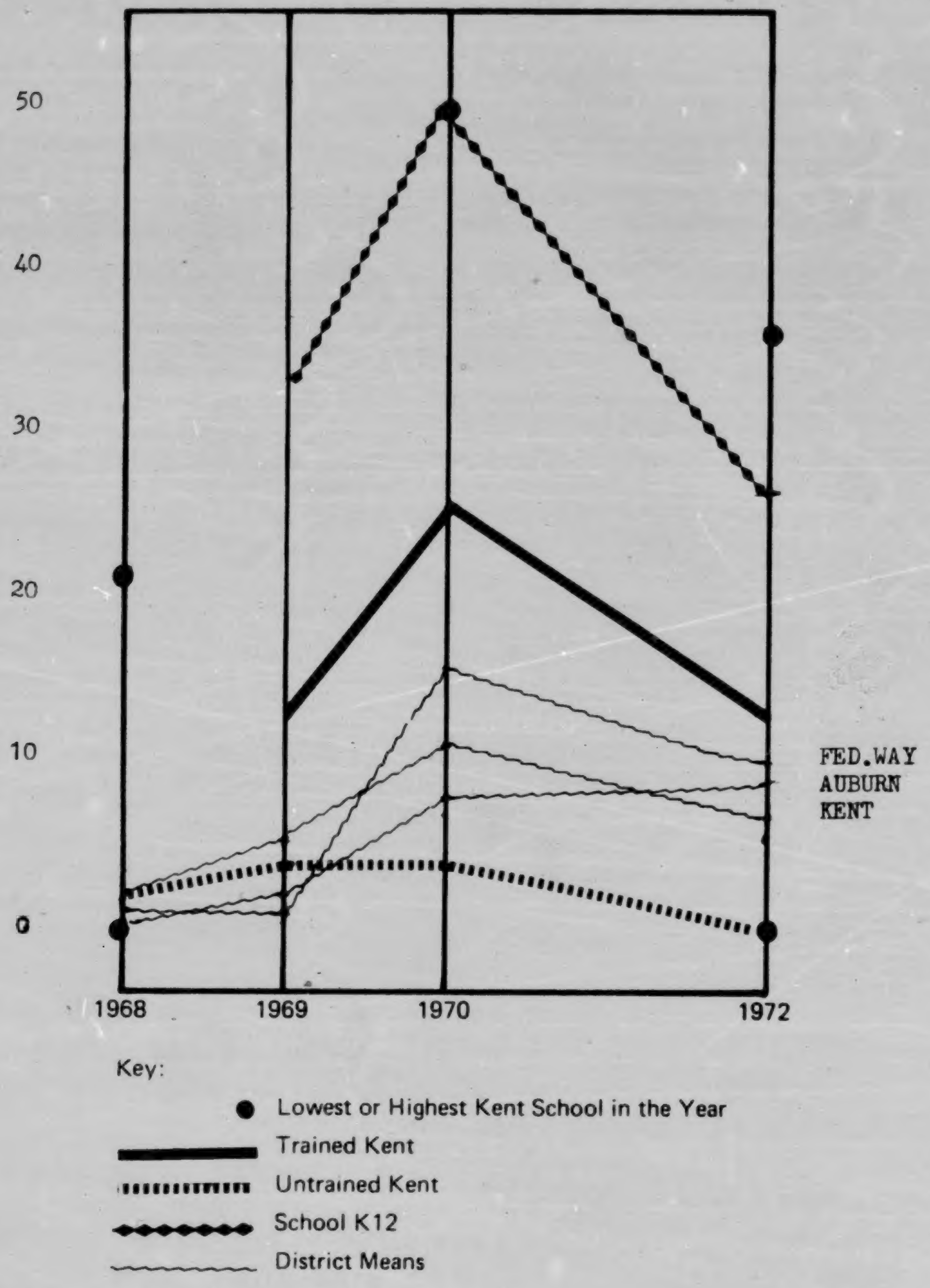
Item: This item concerns the choice of teaching methods you use in your classroom. Please mark "X" before the one statement below that best describes your part in deciding upon the teaching methods to be used in your classroom.

Scores consisted of the percentages of individuals choosing: As a member of a group or committee, I share with others the job of deciding the teaching methods to be used, as their choice.

Percentages of Favorable Responses (Raw Scores)

of Teachers-and-Others

in Elementary Schools to Item 66: test J



APPENDIX 8-B

Mean standard scores of elementary schools in Kent on tests G, H, I, and J, arranged by year, cluster, and whether trained or untrained by that year.

Appendix 8-B

Mean standard scores of elementary schools in Kent on Tests G, H, I, and J, arranged by year, cluster, and whether trained or untrained by that year.

1968 Untrained

	Cluster Gh					Cluster Hg			
	Tests					Tests			
School	G	H	I	J	School	G	H	I	J
K02	-1.00	-1.49	-.53	-1.61	K01	-.65	-.20	-.38	-.76
K03	-.04	-.32	-.51	-1.73	K04	-1.00	.31	.17	.49
K05	1.36	.04	1.50	.72	K07	.54	.64	-.99	.68
K06	1.22	-.81	1.57	.66	K08	1.44	2.50	1.22	1.48
					K09	-1.44	-.15	-1.20	.31
					K10	-.73	-.36	-.98	.02
Mean	.39	-.65	.51	-.49		-.26	-.43	-.34	.33

1969 Untrained

School	G	H	I	J	School	G	H	I	J
K01	-.09	-1.68	-.48	-.39	K03	-.49	1.82	.75	2.06
K02	-.39	-.99	-.43	-1.98	K08	-.54	.39	-1.03	.03
K04	.94	.13	.18	-.15	K09	-1.44	-.15	-1.20	.31
K06	.17	-.63	-.43	-.54	K12	-.77	2.06	2.56	1.53
K07	.95	-.68	.43	.07					
K10	-.49	-1.01	-1.00	-.87					
Mean	.18	-.64	-.29	-.64		-.81	1.03	.27	.98

Trained by 1969

School	G	H	I	J	School	G	H	I	J
K11	2.54	-.80	-.10	-.35	K05	-.39	.54	.75	.28

1970 Untrained

	Cluster G h					Cluster Hg			
	Tests					Tests			
School	G	H	I	J	School	G	H	I	J
K04	1.43	.20	-.38	-.48	K01	-1.54	-.93	-1.20	-1.51
K06	.08	-.38	-.48	-.22	K02	-1.02	-.35	.38	-.10
K07	.42	.20	-1.52	-.16	K03	-.64	-.52	-.66	1.11
K08	.19	-.28	-.11	-.97					
K09	-.64	-.72	-.33	-.07					
K10	-.55	-1.00	-.58	-.22					
Mean	.34	-.33	-.57	-.26		-1.07	-.60	-.49	-.17

Trained by 1970

K11	1.37	1.06	1.67	1.32	K05	-.55	1.78	.38	-.12
					K12	1.59	2.09	2.10	2.25
					K13	-1.22	-1.14	.72	-1.28
					Mean	-.06	.91	1.07	.28

1972 Untrained

K04	.08	.05	-.31	1.05	K01	-1.05	-.83	-.69	-1.51
K06	-.05	-.60	.31	.70	K03	-1.42	-.52	-.79	-.02
K07	-.59	-.83	-.98	-2.04	K10	-1.48	-.37	-1.02	.67
K08	.60	-1.04	-.69	-.20					
K09	-.51	-1.69	-.55	-1.55					
Mean	-.09	-.82	-.44	-.41		-1.32	-.57	-.83	-.29

Trained by 1972

K02	.53	-.52	.14	.88	K05	.20	.99	-.56	-.17
K11	2.23	1.07	1.78	.28	K12	1.33	1.95	2.16	1.58
					K13	-.78	.36	-.62	-.20
					K14	1.02	1.55	.31	.76
					K15	-.11	.42	1.51	-.23
Mean	1.38	.28	.96	.58	Mean	.33	1.05	.56	.35

APPENDIX 8-C

Standard scores of Kent elementary schools on Tests G, H, I, and J from which Tables 8-4 and 8-5 were derived.

Table 8-4 (Extended) Standard scores of Kent elementary schools on Tests H, I, and J arranged according to level of the school's score on Test H and according to whether the school received training.

Level of Test H	Year	School	Test H	Test I	Test J	Test G
Standard score on H greater than 1.00	Trnd by 1972	K11	1.07	1.78	.28	2.23
		K12	1.95	2.16	1.58	1.33
		K14	1.55	.31	.76	1.02
	Trnd by 1970	K11	1.06	1.67	1.32	1.37
		K12	2.09	2.10	2.25	1.59
		K05	1.78	.38	-.12	-.55
	Untrd by 1969	K12	2.06	2.56	1.53	-.77
		K03	1.82	.75	2.06	-.49
Level Mean	Trnd		1.58	1.40	1.02	1.17
	Untr		1.94	1.65	1.80	-.63
Standard score less than 1.00 but greater than 0.00	Trnd by 1972	K15	.42	1.51	-.23	-.11
		K13	.36	-.62	-.20	-.78
		K05	.99	-.56	-.17	.20
	Untr in 1972	K04	.05	-.31	1.05	.08
	Untr in 1970	K07	.20	-1.52	-.16	.42
		K04	.20	-.38	-.03	1.43
	Trnd by 1969	K05	.54	.75	.28	-.39
	Untr by 1969	K04	.13	.18	-.15	.94
		K08	.39	-1.03	.03	-.54
Level Mean	Trnd		.58	.27	-.08	-.27
	Untr		.19	-.61	.15	.46

Standard score less than 0.00 but greater than -1.00	Trnd by 1972	K02	-.52	.14	.88	.53
	Untr by 1972	K10	-.37	-1.02	.67	-1.48
		K01	-.83	-.69	-1.51	-1.05
		K03	-.52	-.79	-.02	-1.42
		K07	-.83	-.98	-2.04	-.59
		K06	-.60	.31	.70	-.05
	Untr in 1970	K06	-.38	-.48	-.22	.08
		K08	-.28	-.11	-.97	.19
		K09	-.72	-.33	-.07	-.64
		K01	-.93	-1.20	-1.51	-1.54
		K02	-.35	.38	-.10	-1.02
		K03	-.52	-.66	1.11	-.64
	Trnd by 1969	K11	-.80	-.10	-.35	2.54
	Untr in 1969	K09	-.15	-1.20	.31	-1.44
		K06	-.63	-.43	-.54	.17
		K07	-.68	.43	.07	.95
		K02	-.99	-.43	-1.98	-.39
		K01	-.68	-.48	-.39	-.09
Level Mean	Trnd		-.66	.02	.26	1.54
	Untr		-.59	-.48	-.41	-.56
Standard score below 1.00	Untr in 1972	K09	-1.69	-.55	-1.55	-.51
		K08	-1.04	-.69	-.20	.60
	Trnd by 1970	K13	-1.14	.72	-1.28	-1.22
	Untr in 1970	K10	-1.00	-.58	-.22	.55
	Untr in 1969	K10	-1.01	-1.00	-.87	-.49
Level Mean	Trnd		-1.14	.72	-1.28	-1.22
	Untr		-1.18	-.70	-.71	.04

Table 8-5 (Extended) Standard scores of Kent elementary schools on Tests G, I, and J arranged according to level of the school's score on Test G and according to whether the school received training.

Level of Test G	Year	School	Test G	Test I	Test J	Test H
Standard score on G greater than 1.00	Trnd by 1972	K11	2.23	1.78	.28	1.07
		K12	1.33	2.16	1.58	1.95
		K14	1.02	.31	.76	1.55
	Trnd by 1970	K11	1.37	1.67	1.32	1.06
		K12	1.59	2.10	2.25	2.09
	Untr in 1970	K04	1.43	-.38	-.03	.20
	Trnd by 1969	K11	2.54	-.10	-.35	-.80
Level Mean	Trnd		1.68	1.32	.97	1.15
	Untr		1.43	-.38	-.03	.20
Standard scores on G less than 1.00 but greater than .50	Trnd by 1972	K02	.53	.14	.88	-.52
	Untr in 1972	K08	.60	-.69	-.20	-1.04
	Untr by 1970	K10	.55	-.58	-.22	-1.00
	Untr by 1969	K04	.94	.18	-.15	.13
		K07	.95	.43	.07	-.68
Level Mean	Trnd		.53	.14	.88	-.52
	Untr		.76	-.17	-.13	-.64

Standard scores on G less than .50 but greater than 0.00	Trnd by 1972	K05	.20	-.56	-.17	.99
	Untr by 1972	K04	.08	-.31	1.05	.05
	Untr in 1970	K08	.19	-.11	-.97	-.28
		K07	.42	-1.52	-.16	.20
	Untr in 1969	K06	.17	-.43	-.54	-.63
Level Mean	Trnd		.20	-.56	-.17	.99
	Untr		.21	-.59	-.15	-.16
Standard scores less than 0.00 but greater than -.50	Trnd by 1972	K15	-.11	1.51	-.23	.42
	Untr in 1972	K06	-.05	.31	.70	-.60
	Trnd by 1969	K05	-.39	.75	.28	.54
	Untr in 1969	K03	-.49	.75	2.06	1.82
		K02	-.39	-.43	-1.98	-.99
		K10	-.49	-1.00	-.87	-1.01
		K01	-.09	-.48	-.39	-.68
Level Mean	Trnd		-.25	1.13	.03	.48
	Untr		-.30	-.17	-.10	-.29

Standard score less than -.50 but greater than -1.00	Trnd by 1972	K13	-.78	-.62	-.20	.36
	Untr in 1972	K09	-.51	-.55	-1.55	-1.69
		K07	-.59	-.98	-2.04	-1.04
	Trnd by 1970	K05	-.55	.38	-.12	1.78
	Untr in 1970	K03	-.64	-.66	1.11	-.52
		K09	.64	-.33	-.07	-.72
	Untr in 1969	K12	-.77	2.56	1.53	2.06
		K08	-.54	-1.03	.03	.39
Level Mean	Trnd		-.66	-.12	-.16	1.07
	Untr		-.61	-.16	-.16	-.25
Standard score less than -1.00	No Trained Schools					
	Untr in 1972	K01	-1.05	-.69	-1.51	-.83
		K03	-1.42	-.79	-.02	-.52
		K10	-1.48	-1.02	.67	-.37
	Untr in 1970	K01	-1.54	-1.20	-1.51	-.93
		K02	-1.02	.38	-.10	-.35
	Untr in 1969	K09	-1.44	-1.20	.31	-.15
Level Mean	Untr		-1.32	-.75	-.36	-.52

APPENDIX 8-D

Means of trained and untrained elementary schools in Kent and of the elementary schools pooled in the Auburn and Federal Way districts on further questionnaire items relating to second level skills.

Means of Responses of Teachers-and-others in Elementary Schools to Item 67

Kent elementary schools

1968			1969				1970		
Untr schs	Mean score		Untr schs	Mean score	Trnd schs		Untr schs	Mean score	Trnd schs
K08	1.65		K12	2.75				2.19	K05
K04	1.31		K03	1.75				1.71	Mean
K02	1.00		K01	1.56				1.68	K12
Mean	.90			1.54	Mean, K05			1.60	K11
K05	.74			1.53	K11		K07	1.39	
K07	.70		K08	1.35			K04	1.31	
K10	.69		Mean	1.29			K09	1.18	
K09	.68		K10	1.20			K08	1.13	
K01	.59		K06	1.13			Mean	1.07	
K03	.50		K07	1.12			K02	.96	
K06	.38		K02	1.11			K06	.95	
			K09	1.00				..94	K13
			K04	.95			K03	.89	
							K10	.88	
							K01	.84	

Differences between means was significant t = 2.04, df = 11, p <.05.

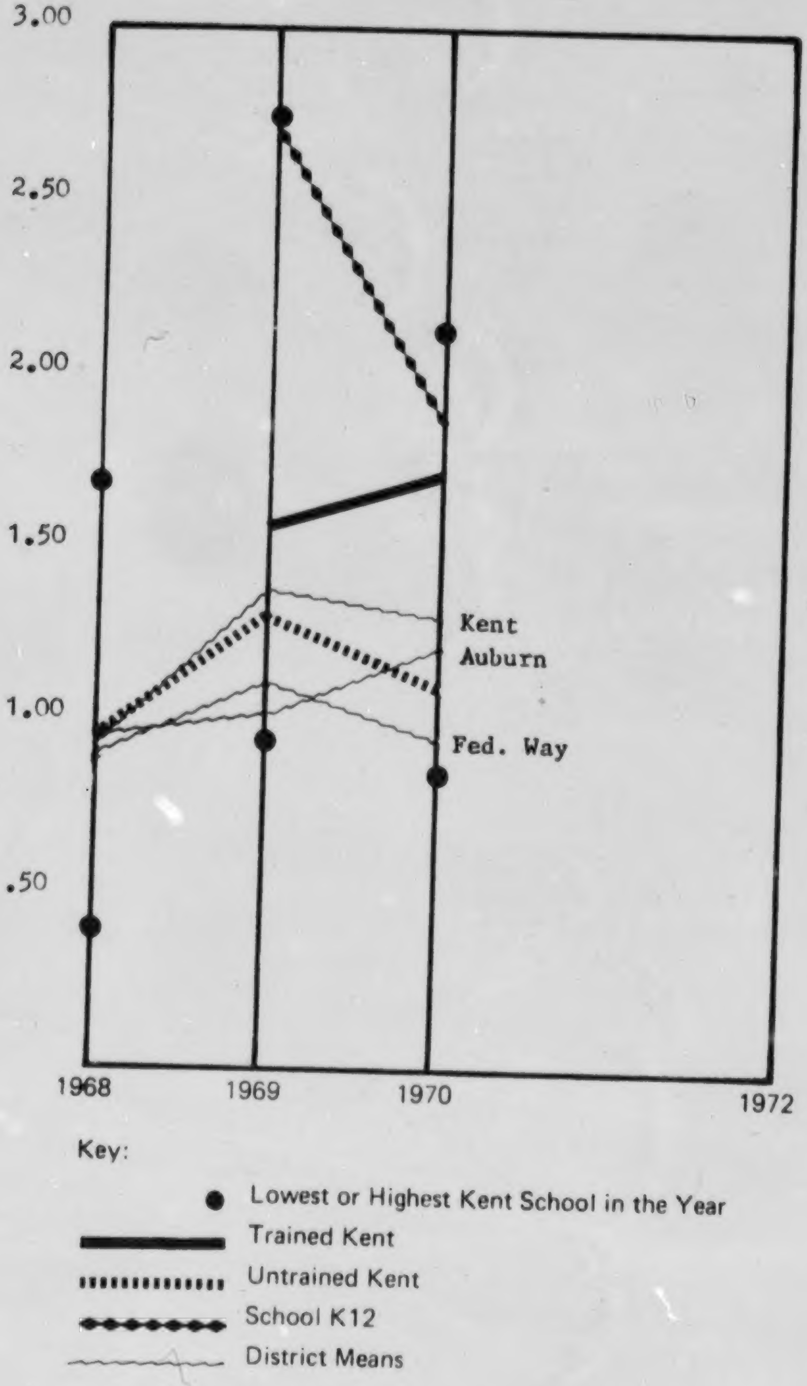
Districts

	1968	1969	1970
Kent	.90	1.33	1.27
Auburn	.90	1.00	1.20
Fed Wy	.85	1.08	.91

Item: If you chose answer 2, 3, 4 or 5 in the question just above you were indicating that at least some other person or persons were somehow involved in deciding upon the subject matter content to be taught in your classroom. If you chose answer 2, 3, 4 or 5 please write below the names and positions of the other persons involved.

Scores consisted of the number of persons listed by the respondent.

Means of Responses of Teachers-and-Others
in Elementary Schools
to Item 67



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 68

Kent elementary schools

1968		1969			1970		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K10	47	K12	56		K09	41	
K02	43		55	K05	K02, 06	40	
K09	38	K03, 07	50		K03	38	
K05	29		46	Mean		37	K05
Mean	28		40	K11	K10	36	
K01, 04	26	K01	35		Mean	34	
07		Mean, 08	32		K07	33	K13
K08	25	K09	29		K08	27	
K03	9	K04	25		K04	24	Mean
K06	0	K02, 10	21		K01	21	
		K06	20			14	K12
						11	K11

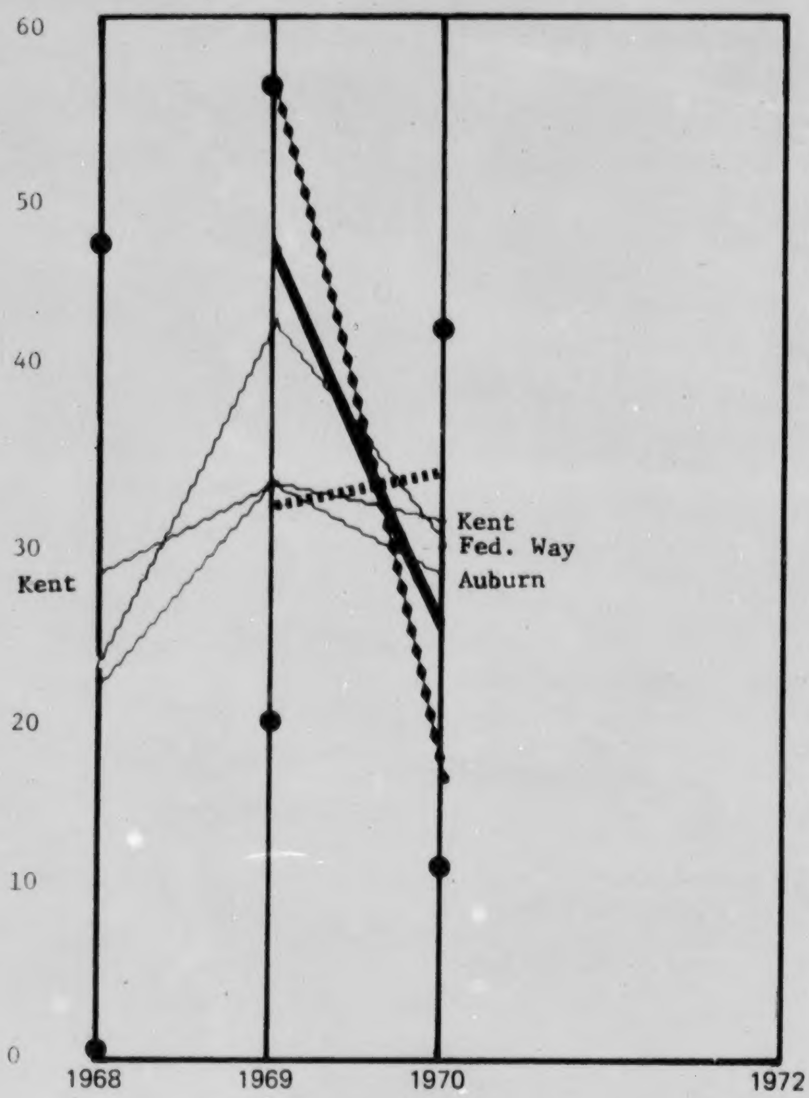
Districts

	1968	1969	1970
Kent	28	34	31
Auburn	22	34	28
Fed Wy	22	43	31

Item: Please mark "X" before the following statement if it best describes your part in deciding upon the subject-matter content to be taught in your classroom.

Favorable response: The final choice of scope and sequence of subject-matter is left to me, but there are other whose job includes making recommendations or suggestions.

Percentages of Favorable Responses
of Teachers-and-Others
In Elementary Schools to Item: 68



Key:

- ● Lowest or Highest Kent School in the Year
- Trained Kent
- Untrained Kent
- School K12
- District Means

Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 69

Kent elementary schools

1968		1969			1970		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K04	16		13	K11		68	K11
K10	7	K01	12	Mean		45	K12
K05	5	K12	11			35	Mean
Mean, 08	4		9	K05		23	K05
K01, 02		K10	8		K03	13	
03, 06	0	K03, 08	5		K02	12	
07, 09		Mean	4		K07	11	
		K02, 03			Mean	6	
		06, 07	0		K08, 09	5	
		09			K04, 10	4	
					K01, 06	0	K13

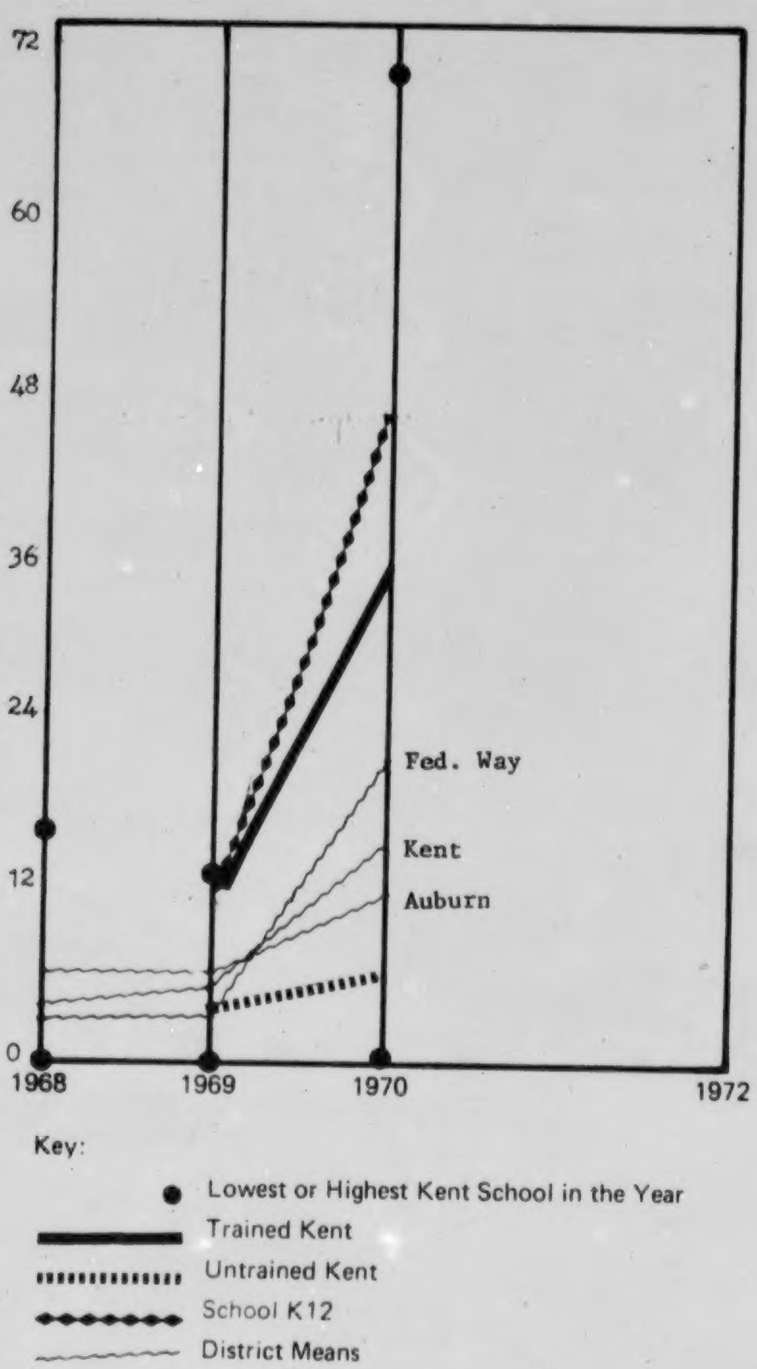
Districts*

	1968	1969	1970
Kent	4	5	15
Auburn	6	6	12
Fed Wy	3	3	21

Item: Please mark "X" before the following statement if it best describes your part in deciding upin the subject-matter content to be taught in your classroom.

Favorable response: As a member of a group or committee, I share with others the job of deciding the scope and sequence of subject-matter content.

Means of Responses of Teachers-and-Others in Elementary Schools to Item: 69



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 81

Kent elementary schools

1968

Untr schs	% fav
K07	8
K10	6
K05	5
Mean	2
K01, 02 03, 04 06, 08 09	0

1969

Untr schs	% fav	Trnd schs
K02	15	K05
K09, 06	13	
K07, 08	11	
K10	8	
Mean	7	Mean
K12, 04 01, 03	0	K11

1970

Untr schs	% fav	Trnd schs
	18	K13
K08	9	
K04	8	
K01, 06, 09	5	
Mean, 10	4	Mean
	3	K05
K02, 03 07	0	K11, 12

1972

Untr schs	% fav	Trnd schs
	30	K14
K10, 01	24	
	20	K15
K03	19	
	18	K12
	14	Mean, 02, 05
Mean	11	
	8	K11
K09	6	
K04, 06 07	5	
	0	K13

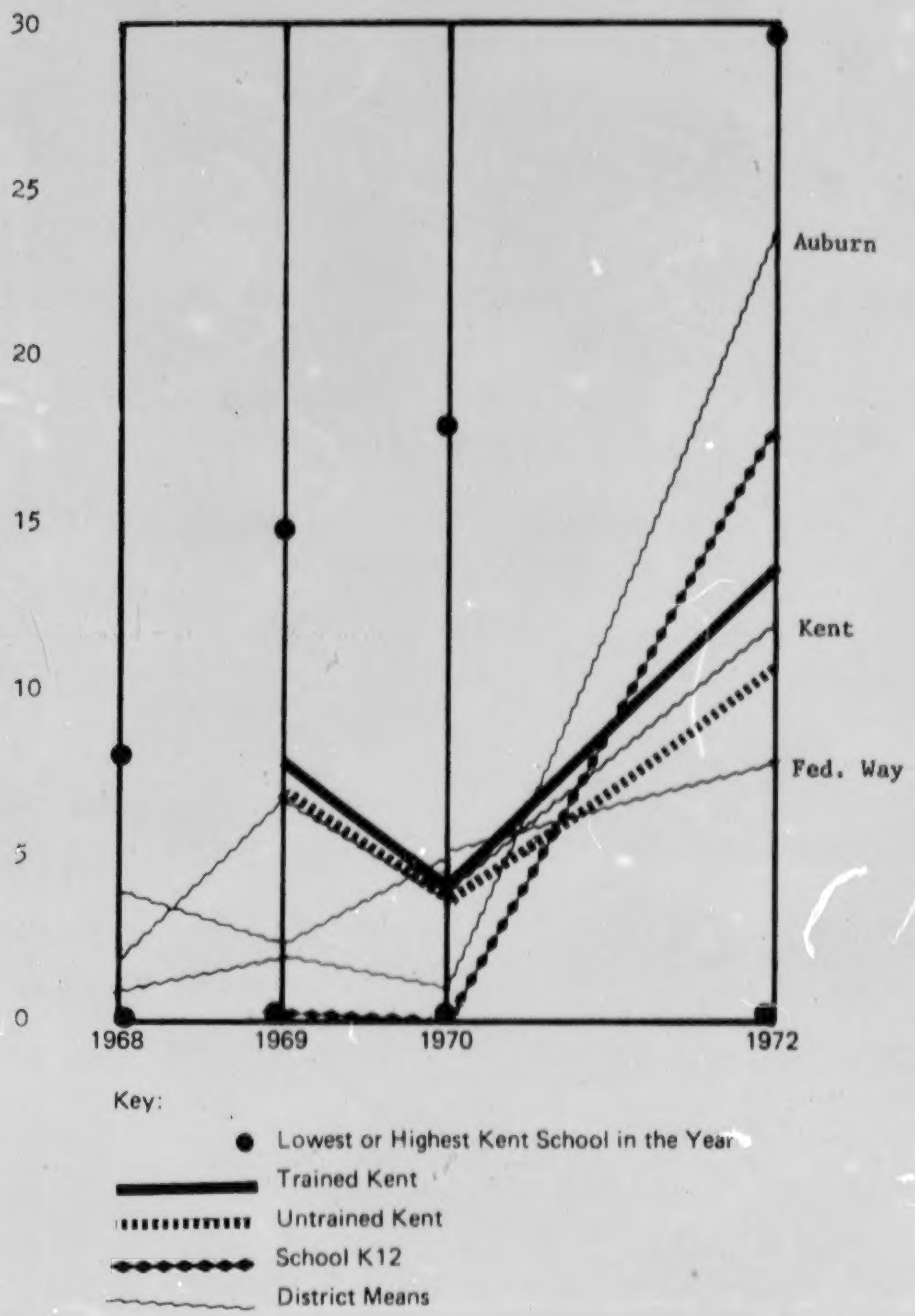
Districts

	1968	1969	1970	1972
Kent	2	7	4	12
Auburn	1	2	1	24
Fed Wy	4	2	5	8

Item: Regardless of the official policy, who actually plans and develops the school curriculum?

Scores consisted of number of persons marking: Citizens' or parents'.

Percentages of Favorable Responses
of Teachers-and-Others
In Elementary Schools to Item: 81



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 82

Kent elementary schools

1968		1969			1970			1972		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
					K04	8		K01	10	
K01, 02		K01, 02			K10	4			7	K02
03, 04		03, 04			Mean	1		K03	6	
05, 06		06, 07		K11	K05, 02			Mean	2	
07, 08	0	08, 09	0	Mean	03, 06		K05, 11		1	Mean
09, 10		10, 12		K05	07, 08	0	Mean	K04, 06		K05, 11
Mean		Mean			09, 01		12, 13	07, 08	0	12, 13
								09, 10		14, 15

Districts

	1968	1969	1970	1972
Kent	0	0	1	1
Auburn	1	1	1	3
Fed Wy	1	0	0	0

Item: Regardless of the official policy, who actually plans and develops the school curriculum?

Scores consisted of number of persons marking: A student committee.

Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 83

Kent elementary schools

1968		1969			1970		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K05	23	K12	22		K08	26	
K03	15	K08	21		K04	23	
K08	8	K06	13			18	K13
K06	7	K07	11		K09	14	
Mean, 10	6	K10	10		Mean	13	
K09	5	Mean	8		K01, 03	10	Mean
K07	4	K01, 09	6		K07	9	K12, 05
K01 02, 04	0	K03 10, 04	0	Mean K05, 11	K10	8	
					K02	7	
					K06	5	K11

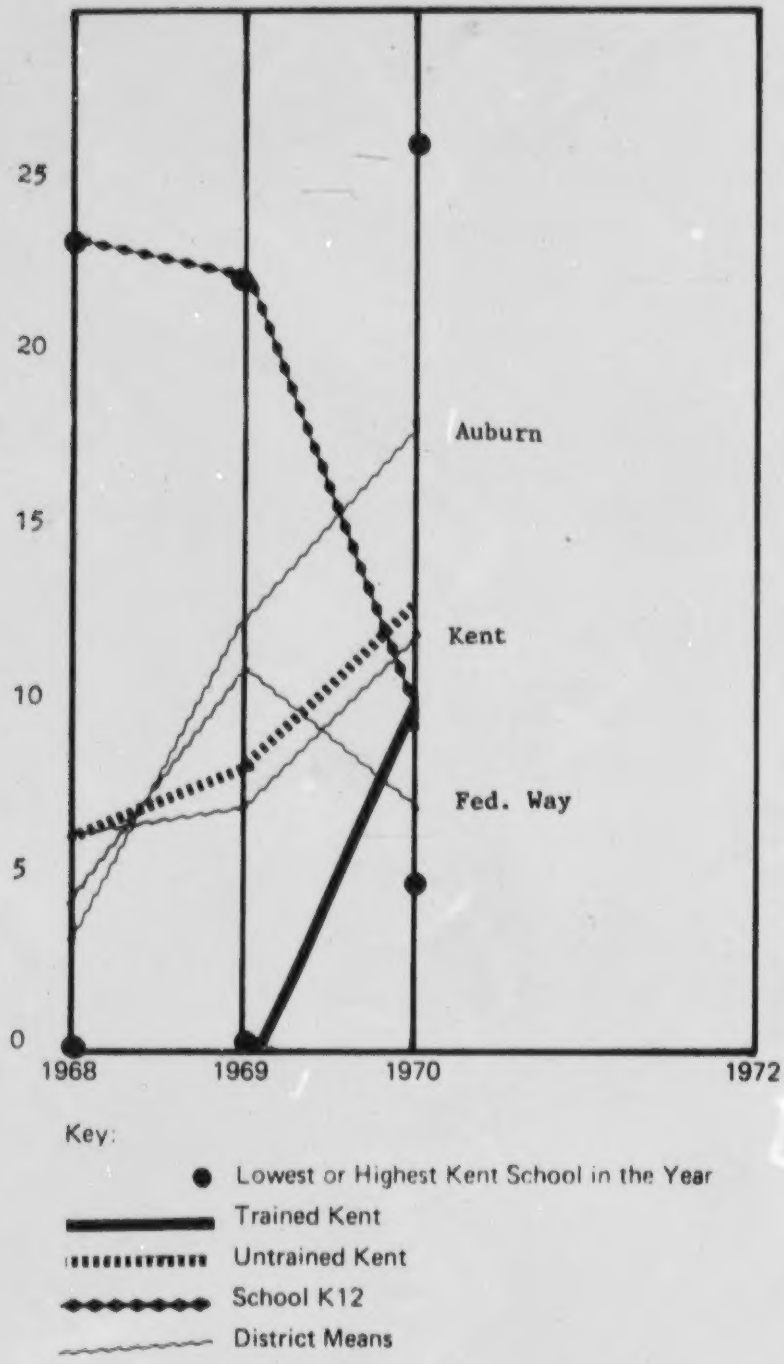
Districts

	1968	1969	1970
Kent	6	7	12
Auburn	3	12	18
Fed Wy	4	11	7

Item: Regardless of policy or who now does it, whom would you prefer to plan and develop the school curriculum?

Scores consisted of number of persons marking: Citizens' or parents' committe.

Percentages of Favorable Responses
of Teachers-and-Others
In Elementary Schools to Item: 83



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 84

Kent elementary schools

1968		1969			1970		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K01, 02, 05	5	K06	20		K08	17	K12
			7	K11	K03, 04	15	
K08	4	K07	6			14	K11
Mean	2	K02	5		K02	11	
K03, 04, 06, 07, 09, 10	0	K10	4	Mean	Mean	10	Mean
		Mean	3		K07	9	
		K01, 03, 04, 08, 09, 12	9	K05	K10	8	
						6	K13
					K01, 06, 09	5	
						3	K05

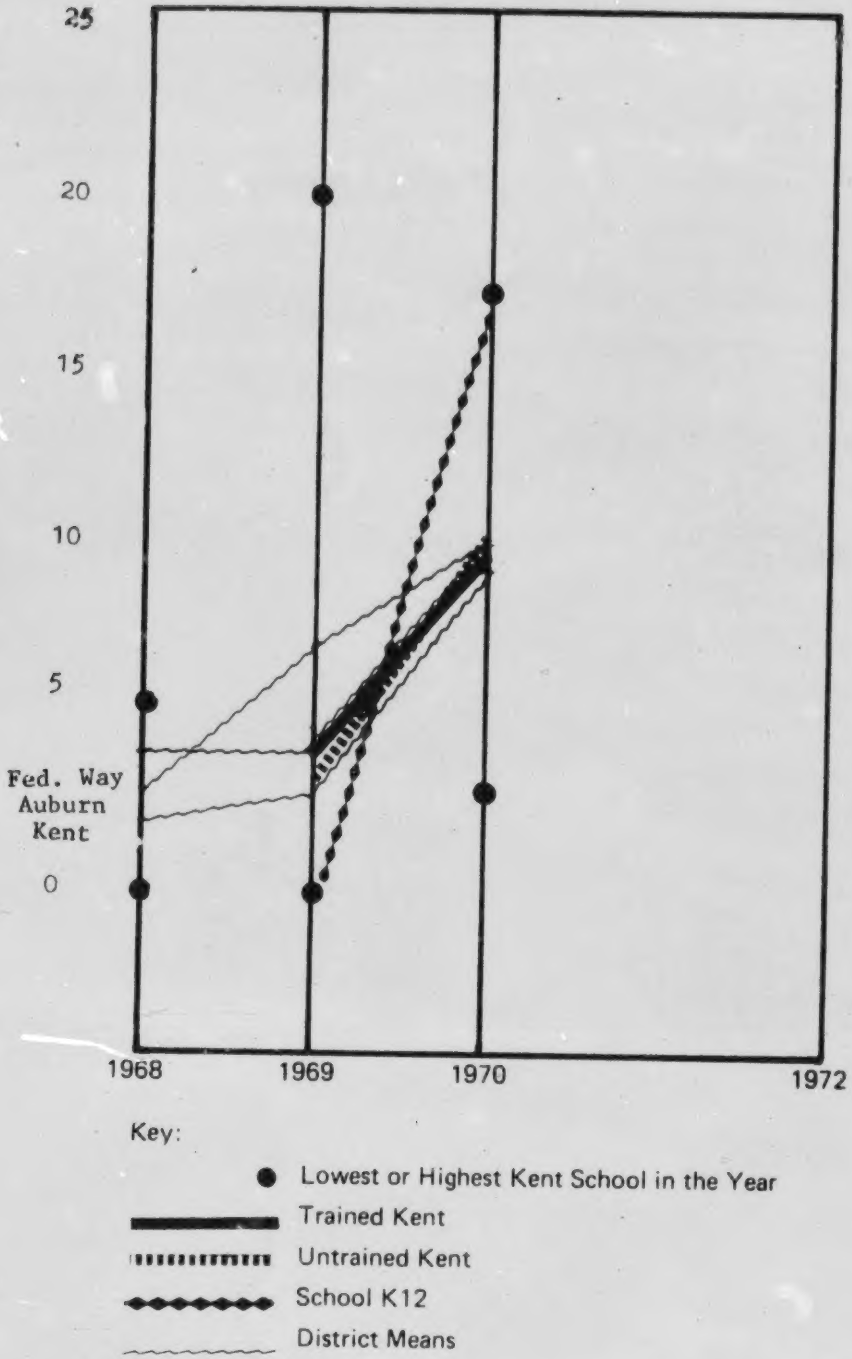
Districts

Kent	2	3	10
Auburn	3	7	10
Fed Wy	4	4	9

Item: Regardless of policy or who now does it, whom would you prefer to plan and develop the school curriculum?

Scores consisted of number of persons marking: A student committee.

Percentages of Favorable Responses
of Teachers-and-Others
In Elementary Schools to Item: 84



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 59

Kent elementary schools

1968	
Untr schs	% fav
K05	5
K08	4
K04	3
Mean	1
K01, 02 03, 06 07, 09 10	0

1969		
Untr schs	% fav	Trnd scns
K08	16	
K03	15	
K07	6	
Mean, 02	5	
K10	4	
K01 04, 06 09, 12	0	K11 K05

1970		
Untr schs	% fav	Trnd schs
K04	38	
K08	17	
	15	K05
	13	K12
	12	Mean
Mean	11	
K01, 03	10	K11
K02	7	
	6	K13
K06, 09	5	
K10	4	
K07	0	

1972		
Untr schs	% fav	Trnd schs
K09	24	
K01	14	K02, 12
K03	13	
	12	K11
	10	K14, 15
	9	Mean
Mean	7	
K04, 06	5	K05
K07, 08 10	0	K13

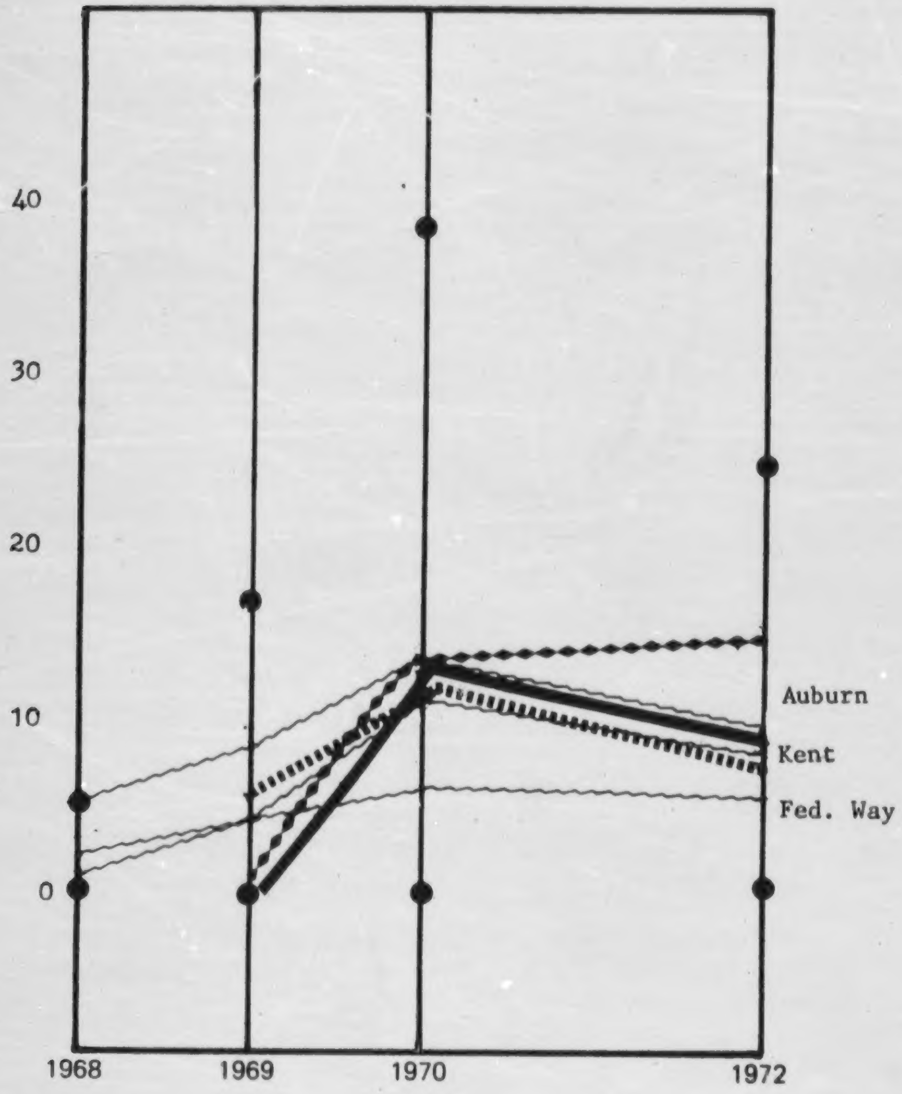
Districts

	1968	1969	1970	1972
Kent	1	4	11	8
Auburn	5	8	13	9
Fed Wy	2	4	6	5

Item: Regardless of the official polciy, who actually develops regulations for student conduct?

Scores consisted of number of persons marking: A student committee.

Percentages of Favorable Responses of Teachers-and-Others In Elementary Schools to Item: 59



Key:

- ● Lowest or Highest Kent School in the Year
- ▬ Trained Kent
- ▬ Untrained Kent
- ◆◆◆ School K12
- ～ District Means

Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 85

Kent elementary schools

1968

Untr schs	% fav
All Kent Schools	0

1969

Untr schs	% fav	Trnd schs
	15	K05
K09	13	
K08	11	
K06	7	Mean
K01	6	
Mean	3	
K02, 03 04, 07 10, 12	0	K11

1970

Untr schs	% fav	Trnd schs
K09	14	
K08	13	K12
K10	12	
	9	K05
Mean, 04	8	
K02	7	Mean
	6	K13
K01, 03	5	
K07	4	
K06	0	K11

1972

Untr schs	% fav	Trnd schs
K01	33	
K10	29	
K03	25	
	20	K14
	18	K12
	16	K11
	14	K02, 05
Mean	13	Mean
K09	6	
K06, 07 08	5	
	4	K13
K04	0	

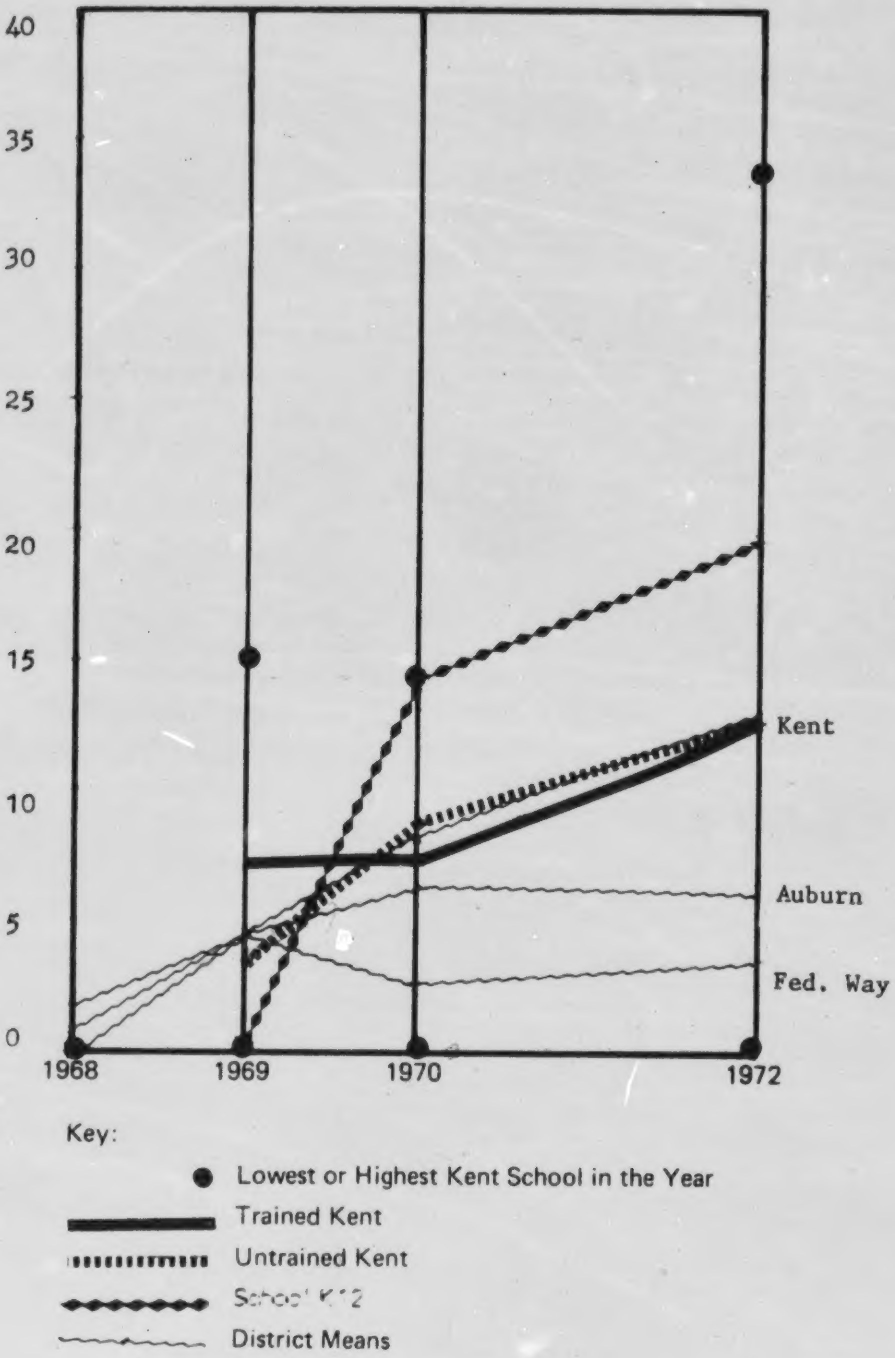
Districts

Kent	0	4	8	13
Auburn	2	4	6	6
Fed Wy	1	4	3	4

Item: Regardless of the official policy, who actually develops regulations for student conduct?

Scores consisted of number of persons marking: Citizens' or parents' committee.

Percentages of Favorable Responses
of Teachers-and-Others
In Elementary Schools to Item: 85



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 86

Kent elementary schools

1968	
Untr schs	% fav
K05	9
K03, 07	8
K01, 02 09	5
Mean	4
K04, 06 08, 10	0

1969		
Untr schs	% fav	Trnd scns
K07	33	
K10	24	
K12	22	
K08	16	
Mean, 09	13	
K02	10	
K03	8	
K06	7	K11
	4	Mean
K01, 04	0	K05

1970		
Untr schs	% fav	Trnd schs
	47	K13
K08	43	
K09	36	
K07	35	
	33	K05
K10	28	
	27	Mean
Mean	26	
K04	23	
K02	21	
	17	K12
K06, 01	15	
K03	10	K11

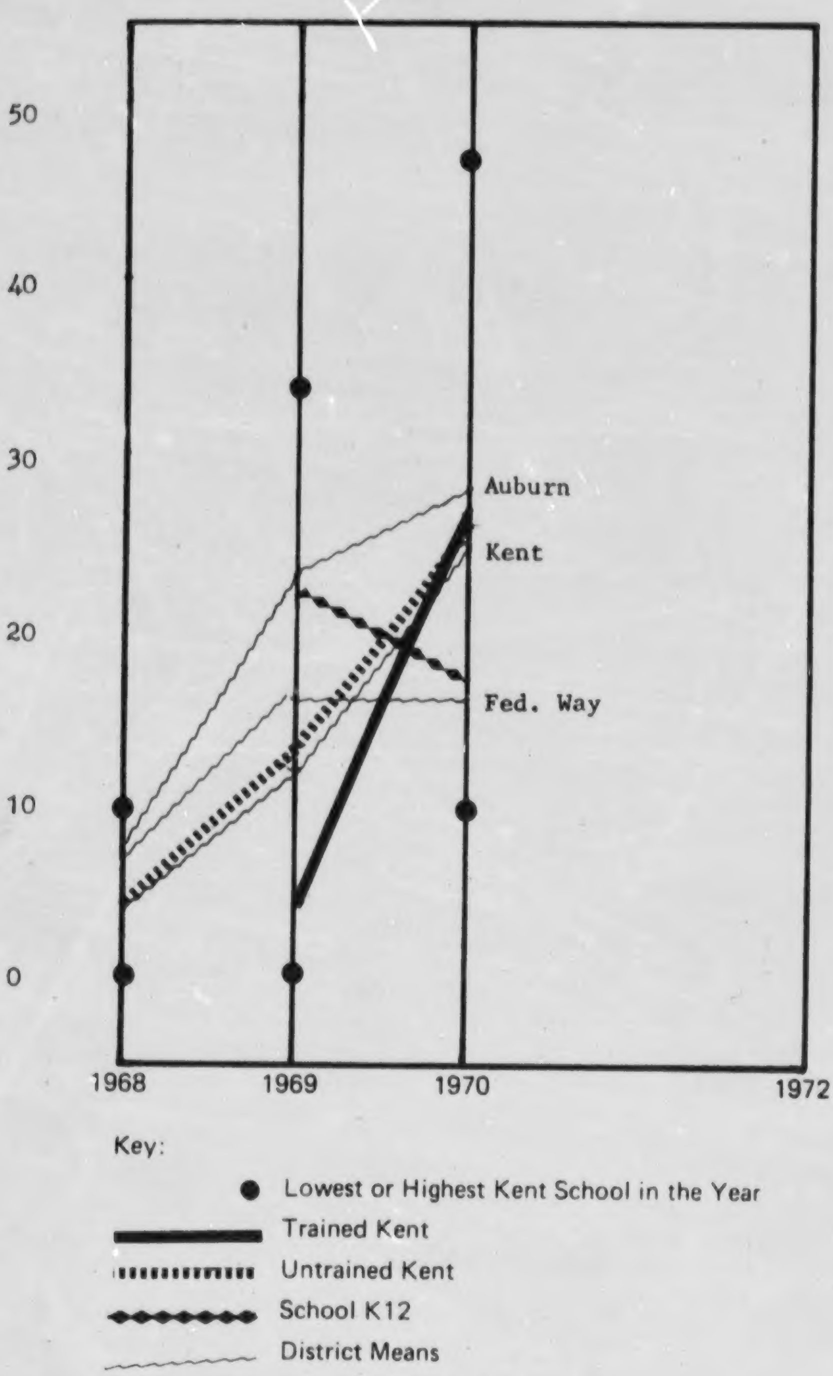
Districts

Kent	4	12	26
Auburn	7	23	28
Fed Wy	6	16	16

Item: Regardless of policy or who now does it, whom would you prefer to develop regulations about student conduct?

Scores consisted of number of persons marking: Citizens' or parents' committee.

Percentages of Favorable Responses
of Teachers-and-Others
In Elementary Schools to Item: 86



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 87

Kent elementary schools

1968		1969			1970		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K06	50	K12	100		K06	90	
K05	45	K07	67		K02	78	
K08	44		62	K05		76	K11
K03	38		61	Mean	K08	70	
K01	36		60	K11	K01	65	K13
Mean	34	K01	59		Mean	63	Mean
K02	33	K03	54		K03	60	
K04, 07	29	K02	50			58	K05
K09	27	K10	48			57	K12
K10	12	Mean	47		K10	56	
		K09	38		K07	52	
		K08	32		K04	50	
		K04, 06	27		K09	45	

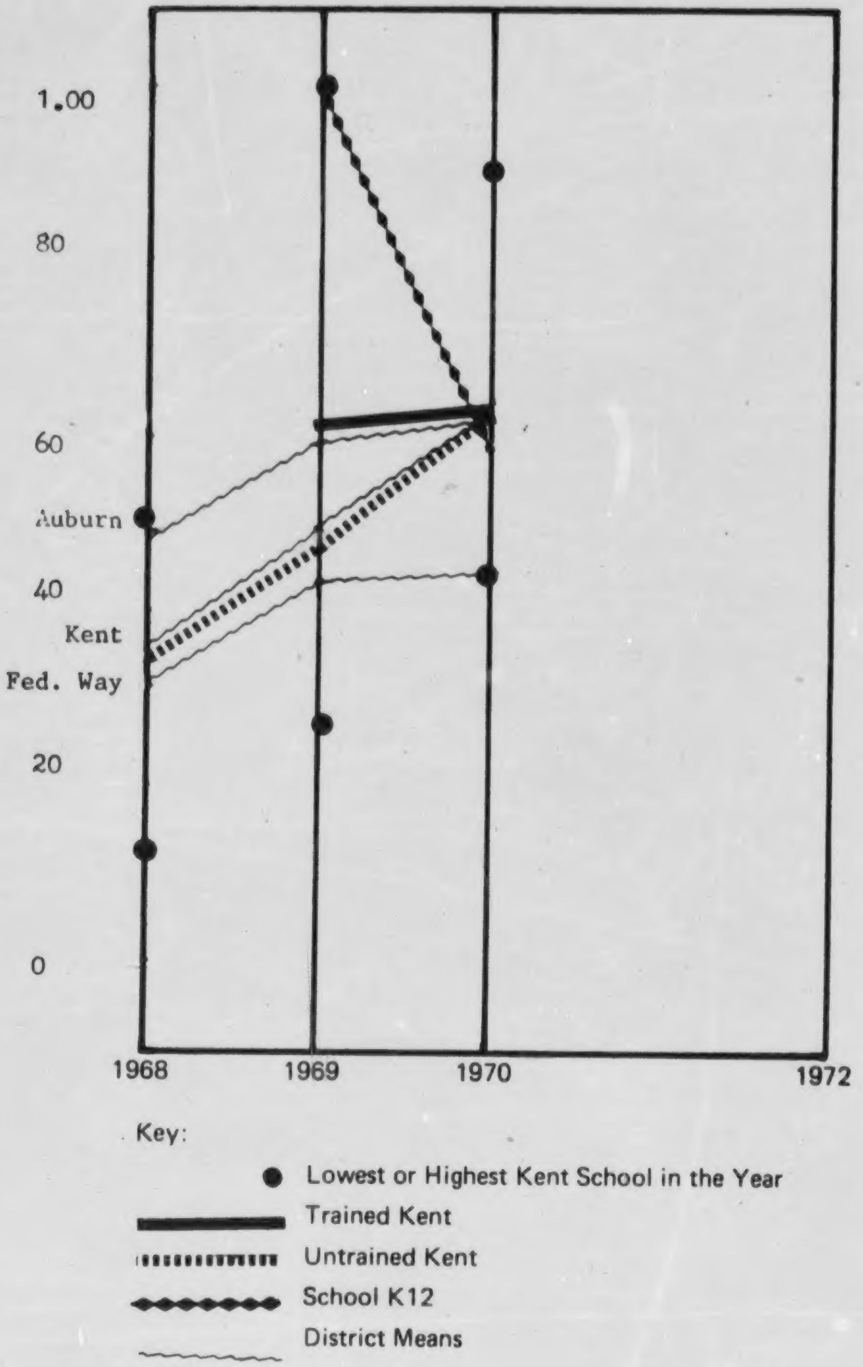
Districts

Kent	34	49	63
Auburn	49	59	62
Fed Wy	31	44	44

Item: Regardless of policy or who now does it, whom would you prefer to develop regulations about student conduct?

Scores consisted of number of persons marking: A group of teachers.

Percentages of Favorable Responses of Teachers-and-Others In Elementary Schools to Item: 87



Percentages of Favorable Responses of Teachers-and-others in Elementary Schools to Item 88

Kent elementary schools

1968		1969			1970		
Untr schs	% fav	Untr schs	% fav	Trnd schs	Untr schs	% fav	Trnd schs
K05	23		38	K05	K08	48	
K02	14	K07	33			47	K13
K08, 10	12	K08	32		K04	38	
Mean, 09	9	K03	25	Mean	K02	36	K05
K07	8	K12	22			35	Mean, 12
K04	6	Mean K02, 06	20		Mean, 10	32	
K01	5				K01, 07	30	
K03, 06	0	K10	16		K03	25	
		K09	13	K11		24	K11
		K01	12		K09	23	
		K04	9		K06	20	

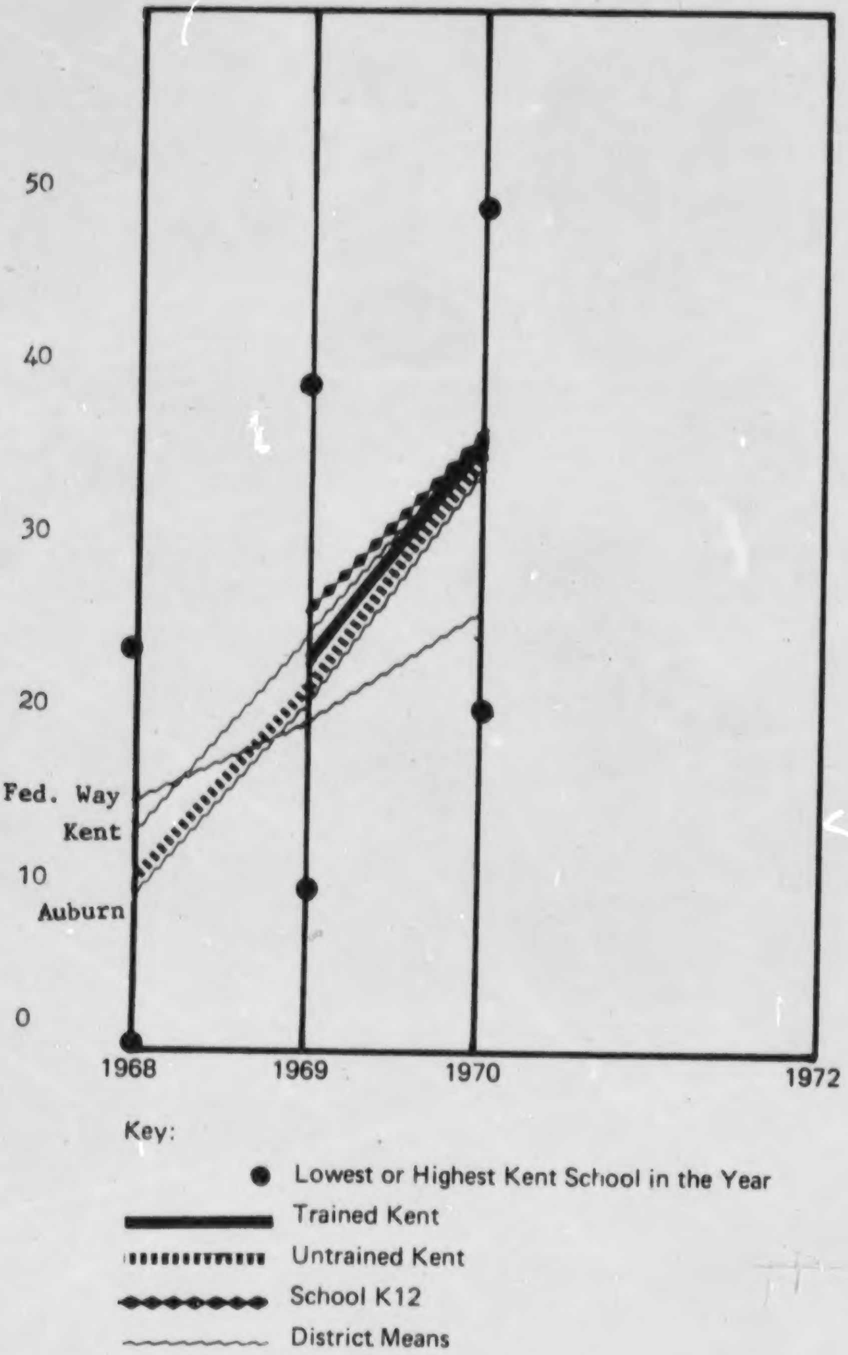
Districts

	1968	1969	1970
Kent	9	20	33
Auburn	13	24	35
Fed Wy	14	18	25

Item: Regardless of policy or who now does it, whom would you prefer to develop regulations about student conduct?

Scores consisted of number of persons marking: A student committee.

Percentages of Favorable Responses
of Teachers-and-Others
In Elementary Schools to Item: 88



Means of Responses of Teachers-and-Others in Elementary Schools to Item 73

Kent elementary schools

1970		
Untr schs	Mean score	Trnd schs
K09	4.48	
K08	4.24	
	4.10	K05
K06	4.05	
	3.85	K11
	3.73	Mean
Mean	3.59	
K04	3.56	
K01	3.52	
	3.38	K12
	3.35	K13
K03, 10	3.32	
K07	3.05	
K02	2.92	

Districts

Kent	3.63
Auburn	3.94
Fed. Way	3.46

Item: To what extent does your principal engage in the following kind of behavior?

Has the relevant facts before making important decisions.

( )	Never	[0 Unfavorable]
( )	Almost never	[1]
( )	Occasionally	[2]
( )	Frequently	[3]
( )	Almost always	[4]
( )	Always	[5 Favorable]
( )	I don't know	[not tallied]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 74

Kent elementary schools

1970		
Untr schs	Mean score	Trnd schs
K03	.79	
	.87	K05
K09	.90	
K06	1.00	
K08	1.24	
	1.26	Mean
	1.27	K12
K01	1.36	
	1.55	K11
Mean	1.63	K13
K04	1.80	
K10	2.13	
K02	2.33	
K07	2.84	

Districts

Kent	1.51
Auburn	1.42
Fed. Way	1.89

Item: To what extent does your principal engage in the following kind of behavior?

Procrastinates in his decision making.

( )	Never	[0 Favorable]
( )	Almost never	[1]
( )	Occasionally	[2]
( )	Frequently	[3]
( )	Almost always	[4]
( )	Always	[5 Unfavorable]
( )	I don't know	[not tallied]

Means of Responses of Teachers-and-Others in Elementary Schools to Item 48

Kent elementary schools

	1972	
Untr schs	Mean score	Trnd schs
	1.35	K15
	1.32	K11, 12
	.95	K14
	.93	K02
	.89	Mean
K04	.76	
K01	.48	
K07	.37	
Mean	.35	
K10	.29	K13
K03	.25	
K09	.24	K05
K06	.20	
K08	.11	

The difference between means was significant: $t=2.78$, $df= 13$, $p< .02$.

Districts

Kent	.62
Auburn	.63
Fed. Way	.[illegible]

Item: Sec. A. Please think of people with whom you talk seriously about things important to you, inside or outside formal meetings, once a week or more on the average. Write their names below.

Sec. B. Who are the persons, if any, whose jobs are so closely related to yours that you believe the two jobs must be performed collaboratively if either of you is to perform this work effectively? Please write their names.

Scale: For each match (same person named in both Sec. A and Sec. B) the respondent was credited with a count of one.

Item 72

First we asked the principal to respond to the following item:

What would you feel are the four primary objectives toward which effort should be put in your school system during the next two years? Put 1 by the one most important, 2 by the next most, 3 by the next most, and 4 for the 4th most important.

- ( ) Reducing the dropout rate.
- ( ) Improving attention to basic skills in the first three grades.
- ( ) Improving attention to physical health and safety of students.
- ( ) Increasing children's motivation and desire to learn.
- ( ) Improving learning opportunities for disadvantaged children.
- ( ) Increasing the percentage of college attendance by graduates.
- ( ) Improving discipline and the behavior of "difficult" children.
- ( ) Increasing the level of academic achievement in all grades.
- ( ) Improving children's adherence to moral and ethical standards.
- ( ) Improving learning opportunities for gifted or talented children.
- ( ) Other; specify ________________________________.

Second, we asked each teacher to estimate how the principal would have answered the above item.

We then computed Spearman's rho between the principal's rank order and the rank order of each teacher in that school. We averaged these correlations and reported the mean correlation for each school.

Correlation between Principal's and Teacher's responses to Item 72 in Elementary Schools

Kent elementary schools

1968

Untr schs	Mean score
K02, 08	.54
K04	.53
K05	.43
Mean	.37
K06	.32
K01	.31
K10	.24
K07, 09	.22
K03	.09

1969

Untr schs	Mean score	Trnd schs
K04	.58	
K09	.56	
	.55	Mean, 11
K10	.50	
K01, 07	.42	
Mean	.39	
K12	.20	
K06	.04	
K03	.05	

Schools K02, 08, 05 not listed because principal did not respond.

1970

Untr schs	Mean score	Trnd schs
K10	.67	
K09	.61	
	.55	K11
	.53	K13
K07	.51	
	.44	Mean
	.43	K12
Mean	.41	
	.33	K05
K04	.22	
K03	.19	
K06	.03	

Schools K01, 02, 08 not listed because principal did not respond.

1972

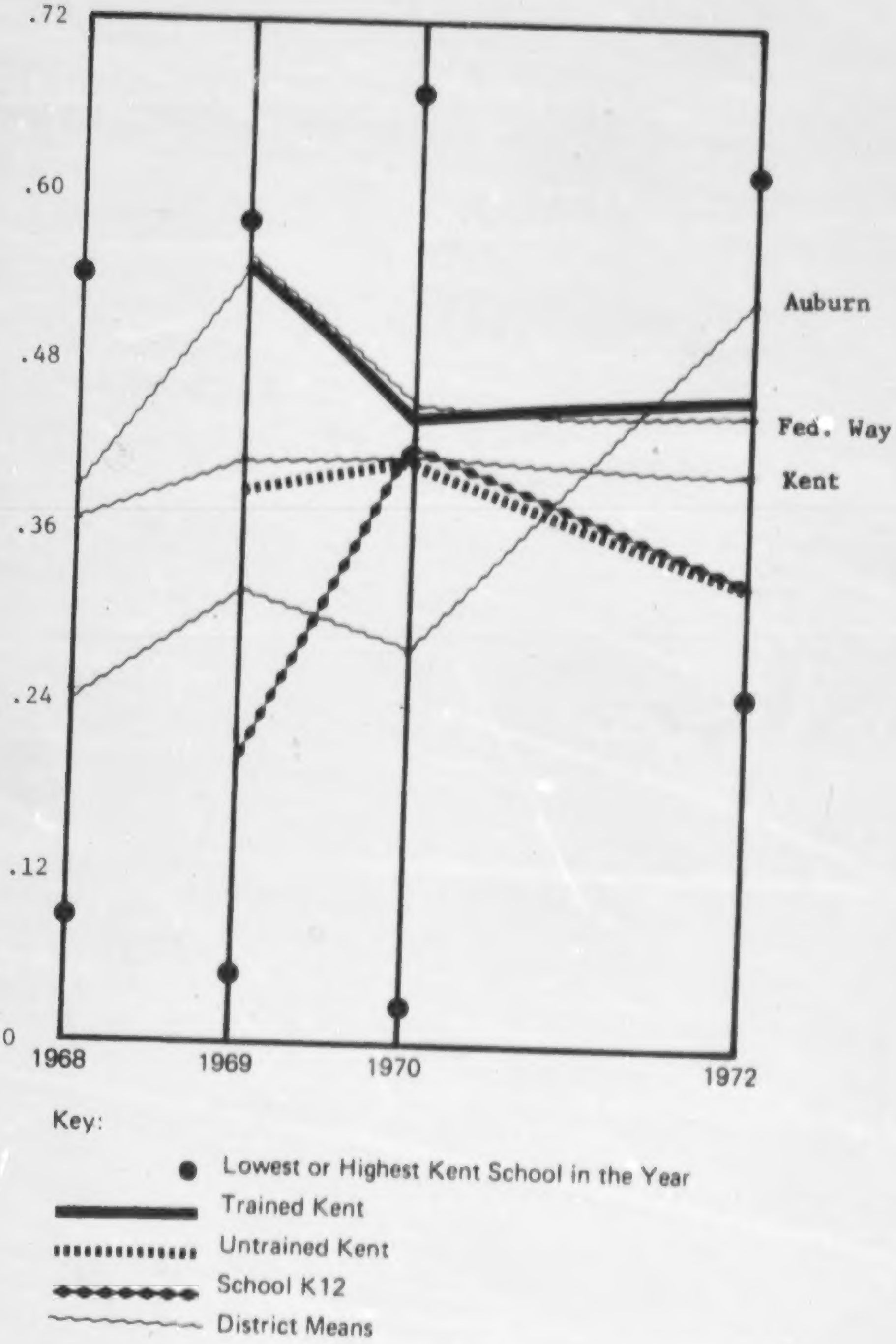
Untr schs	Mean score	Trnd schs
	.61	K05
	.52	K14
	.46	Mean
	.45	K13
K06	.41	
Mean, 04	.33	K12
K10	.32	
K09	.26	
	.25	K15

Schools K01, 03, 07, 08, 02, 11 not listed because principal did not respond.

Districts

	1968	1969	1970	1972
Kent	.37	.41	.42	.41
Auburn	.25	.32	.28	.53
Fed Wy	.39	.55	.45	.45

Correlation between Principal's and Teachers
responses to Item 72 in Elementary Schools



Means of Responses of Teachers-and-Others in Elementary Schools to Item 89

Kent elementary schools

	1972	
Untr schs	Mean score	Trnd schs
K03	75.50	
K04	75.05	
	74.27	K12
K10	70.00	
K06	69.20	
K01	68.95	
Mean	68.41	
	67.20	K14
K07	67.00	
K08	66.74	
	63.20	K15
	62.74	K13
	62.53	Mean
	58.40	K11
	58.29	K02
K09	52.75	
	52.10	K05

Districts

Kent	65.46
Auburn	65.84
Fed. Way	64.37

Item:* How often do you yourself discuss goals of this sort in INFORMAL occasions (coffee room, corridors, while picking up mail, in the parking lot, etc.)? Please make an "X" before the answer that comes closest to your case.

( )	Never	[0 Unfavorable]
( )	Once or twice a year, maybe.	[2]
( )	About once a month, maybe.	[12]
( )	More than once a month but not once a week.	[24]
( )	About once a week:	[52]
( )	More than once a week.	[104 Favorable]

* The numerial values reported indicate the number of times the staff discussed the school's goals in informal settings during the year. A score of 68 indicates that the staff discussed the school's goals an average of 68 times during the year in informal settings.

Means of Responses of Teachers-and-Others in Elementary Schools to Item 78

Kent elementary schools

1972		
Untr schs	Mean score	Trnd schs
	4.25	K12
K09	4.07	
	3.70	K11
	3.33	K14
	3.00	K02
	2.91	Mean
K04	2.84	
K06	2.80	
Mean	2.69	
K07	2.62	
K03	2.52	
	2.50	K05
K10	2.44	
	2.38	K15
K08	2.32	
K01	1.90	
	1.60	K13

Districts	
Kent	2.83
Auburn	2.50
Fed. Way	2.52

Item: Sometimes it is easier to get a job done if a well-coordinated group works on it instead of a single individual or a series of individuals. Some people are especially skillful at getting such a work group together and getting them organized into an effective team. Are there some teachers on the staff who clearly have this special coordinating ability?

About how many are there?

Percentages of Favorable Responses of Teachers-and-Others in Elementary Schools to Item 79

Kent elementary schools

1972		
Untr schs	% fav	Trnd schs
	100	K12
K04, 08	95	
	92	K02, 11
K06	90	K14
K03	87	
	86	Mean
	85	K15
Mean K07	84	
K10	82	
K09	77	
	76	K05
	68	K13
K01	67	

Districts	
Kent	85
Auburn	84
Fed. Way	82

Item: Are there others who generally seem able to fit quickly and effectively into a work team as it is getting organized?

( ) Many [Favorable]
( ) Some [Favorable]
( ) Only one or two [Unfavorable]
( ) None [Unfavorable]
( ) I don't know [Not tallied]

Percentages of Favorable Responses of Teachers-and-Others in Elementary Schools to Item 80

Kent Elementary Schools

1972		
Untr schs	% fav	Trnd schs
K10	76	
	68	K12
	60	K05
K08	58	
K04	55	
K03	50	K11
	43	K02
Mean	41	
K06	40	
	37	Mean
K09	29	
	15	K14, 15
K01	14	
	12	K13
K07	11	

Districts

Kent	39
Auburn	24
Fed. Way	22

Item: Are temporary work teams used very often for the temporary, special tasks that come up in your school?

( ) For many tasks every year [Favorable]
( ) For some tasks every year [Favorable]
( ) For only one or two tasks during a year [Unfavorable]
( ) For none [Unfavorable]
( ) I don't know [Not tallied]

Appendix 10-A

The manner of calculating responses on innovations and calculating cumulated percentages

The original coding scheme used 49 categories. The coders were instructed to apply one of these 49 categories to one respondent in one year only once; that is, if the respondent wrote in more than one innovation, but a later one seemed to fall in the same category as an earlier one, the second one was ignored. The purpose was not to count innovations, but to catalogue the various kinds that would be reported.

Every response was double-coded. That is, each response was coded by two coders working independently. After comparing codes, each disagreement (there were not many) was resolved through discussion and occasional appeal to a third person.

The original 49 categories were then pooled into five. The more frequent of the original 49 categories are listed below under the new five headings. Each of the old categories is followed by a word indicating its relative frequency of occurence.

A. Structural

- Problem solving (rare)
- Rearrangement of power (extremely rare)
- Evaluation of program (rare)
- Communication (rare)
- Organizational structure (rare)
- New positions or changes of administrative duties (rare)

B. Collaboration in the classroom

- Teaching teams, duties as a teacher (rather frequent)
- Relationships in the classroom (extremely rare)

C. Curriculum (this single category was rather frequent)

D. Cloistered innovations and miscellaneous

Training (extremely rare)
Search for new inputs (extremely rare)
Finance (extremely rare)
Building and equipment, TV (rare)
Attitudes (extremely rare)
Other (extremely rare)

E. Nothing (lack of an answer was frequent)

We cumulated the percentages of these five new classes of response in each school as follows. In each school, the percentage of respondents giving any old category now belonging to a particular new category was taken across the first opportunity (the first write-in line on the questionnaire) the respondent had to answer. To this percentage was added the percentage of respondents giving old categories at their second, third, and fourth opportunities that belonged to the same new category. The "cumulative percentage" for any one new category was obtained simply by adding the percentages for that category across the four possible lines of write-ins. Such a figure is not the percentage of respondents aware and approving of a particular innovation or of a type of innovation. It is the proportion of times mentioned of one type of innovation.

Despite the fact that we ignored repetitions of any of the 49 original categories, it still remained possible, after the original categories were pooled into five, for a respondent to be counted as having given two or more instances of one of the larger categories. In brief, the cumulative percentage is a composite of (1) those things the respondents feel to be "new," (2) of those, the things the respondents feel are "useful" or "helpful," and (3) those kinds of things salient enough in enough people's perceptions to be mentioned relatively frequently, regardless of whether they were mentioned first, second, third, or fourth. Although it may seem obsurd to speak of a percentage over 100, the relative sizes of the cumulated percentages can nevertheless tell us the relative saturation, so to speak, that a class of innovation found in the perceptions of the staff as present and useful.

The percentages of respondents writing in nothing were never cumulated. Coders always treated empty lines as if they came after the write-ins, whether they did or not. Consequently, the respondents coded as having given no response on the first line were respondents who gave no response on any line. Percentages of "no answer" are actual percentages of respondents. This manner of treating answers maintains what we consider the proper relation between answers and no answers: namely, as cumulated percentages in other categories rise, the percentage of no-answers goes down.

Appendix 10-B

Cumulated percentages of reports of five kinds of innovations in elementary schools in Kent, arranged in descending order and labelled by kind of innovation (for which see text)

School	Kind and percentage				
K01 in 1968	N	B	(C	D)	A
	59	50	14	14	9
in 1969	B	(A	C	N)	D
	53	29	29	29	12
in 1970	N	C	(A	B)	D
	55	25	20	20	5
in 1972	N	A	(B	C	D)
	48	19	14	14	14
K02 in 1968	(B	D)	(C	N)	A
	38	38	33	33	10
in 1969	(A	C	N)	B	D
	35	35	35	30	15
in 1970	C	N	B	A	D
	47	36	29	18	11
in 1972*	C	B	(A	N)	D
	71	29	21	21	7
K03 in 1968	N	C	(B	D)	A
	62	31	23	23	0
in 1969	B	(C	D)	N	A
	77	46	46	23	0
in 1970	C	D	(B	N)	A
	60	55	30	30	10
in 1972	N	B	(C	D)	A
	50	31	19	19	6
K04 in 1968	B	N	C	D	A
	58	39	36	26	3
in 1969	C	D	B	N	A
	91	41	32	18	0
in 1970	C	D	(B	N)	A
	62	35	19	19	15
in 1972	C	(A	D)	B	N
	57	33	33	19	14
K05 in 1968	B	C	N	D	A
	50	41	27	23	5
in 1969*	B	(C	D)	N	A
	108	39	39	15	8
in 1970	B	N	C	D	A
	49	42	31	24	6
in 1972*	N	C	B	A	D
	52	24	14	10	5
K06 in 1968	N	C	B	D	A
	57	36	29	14	7
in 1969	B	N	D	C	A
	67	47	33	20	0
in 1970	N	B	C	D	A
	45	30	26	20	5
in 1972	C	B	A	D	N
	45	35	30	25	20
K07 in 1968	N	C	B	D	A
	63	29	21	8	4
in 1969	B	C	A	N	D
	72	33	22	17	11
in 1970	C	B	N	A	D
	104	48	35	17	9
in 1972	N	C	D	A	B
	47	37	16	5	0
K08 in 1968	B	D	N	C	A
	116	40	16	12	4
in 1969	B	(D	N)	C	A
	68	26	26	16	0
in 1970	B	N	C	D	A
	48	39	26	17	4
in 1972	C	N	D	B	A
	47	42	26	5	0

* This school received OD training between this assessment and the previous assessment, if any.

Cumulated percentages of reports of five kinds of innovations in elementary schools in Kent, continued

School	Kind and percentage				
K09 in 1968	N	B	C	D	A
	64	41	27	9	5
in 1969	B	N	D	(C	A)
	69	38	25	13	13
in 1970	(N	D)	B	C	A
	36	36	27	27	9
in 1972	N	C	B	A	D
	47	35	24	12	6
K10 in 1968	B	N	C	D	A
	59	41	35	24	6
in 1969	B	N	D	C	A
	72	40	28	16	4
in 1970	A	B	C	(D	N)
	44	40	32	16	16
in 1972	C	A	B	N	D
	71	41	35	24	6
K11 in 1969*	B	C	D	N	A
	100	40	20	13	7
in 1970	B	C	D	N	A
	57	52	24	19	14
in 1972*	C	A	N	B	D
	52	32	20	16	12
K12 in 1969	B	(C	D)	A	N
	133	33	33	22	0
in 1970*	(A	B)	(C	N)	D
	52	52	22	22	17
in 1972*	A	D	C	N	B
	41	32	27	23	0
K13 in 1970*	C	B	A	D	N
	59	41	24	18	12
in 1972*	N	A	C	B	D
	43	29	25	21	14
K14 in 1972*	N	C	B	D	A
	50	40	25	20	15
K15 in 1972*	N	(A	B	D)	C
	60	15	15	15	10

* This school received OD training between this assessment and the previous assessment, if any.

Cumulated percentages of reports of five kinds of innovations in elementary schools in Auburn, arranged in descending order and labelled by kind of innovation (for which see text)

School	Kind and percentage				
A01 in 1968	(B	C	N)	(A	D)
	44	44	44	11	11
in 1969	B	D	C	N	A
	78	56	22	11	0
in 1970	B	N	C	D	A
	50	40	20	10	0
A02 in 1968	B	N	C	D	A
	45	39	28	17	11
in 1969	C	(B	N)	D	A
	52	38	38	5	0
in 1970	D	C	N	(A	B)
	81	25	13	6	6
in 1972	C	B	(A	D)	N
	84	37	21	21	5
A03 in 1969	D	(B	C)	N	A
	92	39	39	15	8
A04 in 1968	N	(B	D)	C	A
	50	39	39	6	0
in 1969	C	B	N	D	A
	71	53	35	24	0
in 1970	B	N	D	C	A
	59	41	12	6	0
in 1972	C	A	B	D	N
	77	47	35	30	0
A05 in 1968	N	D	(A	B	C)
	43	29	14	14	14
in 1969	N	D	B	(A	C)
	50	33	17	0	0
in 1970	(B	D)	A	(C	N)
	100	100	50	0	0
A06 in 1968	N	B	C	D	A
	78	17	11	6	0
in 1969	N	C	(B	D)	A
	53	27	13	13	0
in 1970	N	A	D	B	C
	53	26	11	5	0
in 1972	(B	C)	D	(A	N)
	41	41	24	18	18
A07 in 1968	N	C	(B	D)	A
	73	18	9	9	0
in 1969	B	N	C	D	A
	50	45	15	10	0
in 1970	D	B	(A	N)	C
	56	44	31	31	0
in 1972	B	C	N	(A	D)
	59	55	23	5	5
A08 in 1969	C	B	N	D	A
	64	57	43	14	0
in 1970	A	B	(C	D)	N
	33	28	11	11	6
in 1972	C	(B	D)	A	N
	59	41	41	9	5
A09 in 1968	(C	N)	D	B	A
	43	43	29	14	0
in 1969	N	B	(A	C	D)
	86	29	0	0	0
in 1970	(B	N)	(A	C	D)
	50	50	0	0	0

Cumulated percentages of reports of five kinds of innovations in elementary schools in Auburn, continued

School	Kind and percentage				
A10 in 1970	B	C	(A	N)	D
	63	42	37	37	26
" in 1972	N	C	B	D	A
	65	24	18	12	0
A11 in 1972	N	C	B	(A	D)
	47	42	16	5	5
A12 in 1972	(B	C)	N	(A	D)
	43	43	29	14	14

Appendix 10-C

Some actual responses to the questionnaire items that were coded as as A-innovations, selected to be representative

School K12 in 1970:

Staff decides together concerning the issues.

Remove threat of failure through positive reinforcement, new methods of control that protect the child's self-image: i.e., modeling reinforcement.

Reduce the ratio of children to adults to 1/10 by using parent volunteers.

Workshop just before school started to team-organize and plan.

Communication workshop in August and October.

Behavior modification program started in Sp. Ed. dealing within kids' regular class.

School K11 in 1972:

Superintendent's Communication Seminar.

More interaction and exchange of students for academic subjects.

More open (unscheduled) time in resource center. More opportunity to use as needs arise.

Opportunity to attend HEMLOC meetings (elementary teachers form open-concept schools).

Grades 1 & 2 are working together as a total unit rather than separate grades. I expect this will help to encourage other grades in the same direction. The entire school has begun to work together on some elective type classes.

New principal -- more organization, someone who takes responsibility of final say in problem areas.

School K04 in 1972:

Behavioral objectives -- teaching managing by means of,

Move toward peer evaluation.

Sharing of ideas and talents in teacher planning.

Implementation of a citizens-communications and planning council.

Pre-Kindergarten screening promises better starts for many children (because of follow-up).

Teacher evaluation program study.

Faculty committee to set up standard of teacher evaluation.

School A06 in 1970:

An attempt by central office to communicate with teachers.

Rumor center-extension to call to clarify what's heard on the "grape vine." Daily interschool delivery for materials and communication. District "newsletter" about goings on.

Courier service between schools.

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